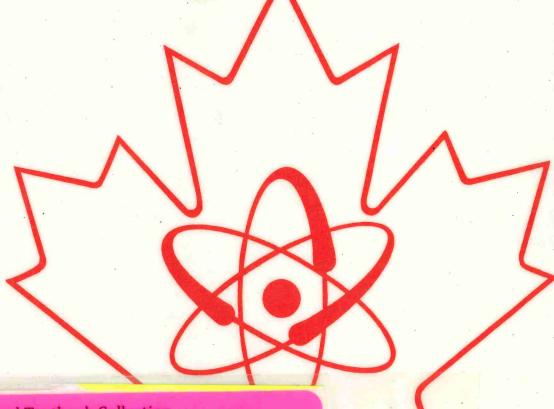
Science A Bibliography for the Middle Level

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SASKATCHEWAN CURRICULUM GUIDES

SCIENCE

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Science: a bibliography for the middle level (1993)

February 1993

LIBRARY USE ONLY Science A Bibliography for the Middle Level

Prepared by:

Instructional Resources Branch Curriculum and Instruction Division

Saskatchewan Education February 1993

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Acknowledgements

Saskatchewan Education expresses its appreciation to the publishers, distributors and producers who provided resources for examination and gratefully acknowledges the contribution made by the following educators who served as materials evaluators. While we have attempted to list everyone who was involved in evaluating materials, we may have missed someone. Please accept our apologies if your name has been omitted.

Ron Adair **Brett Adams** Mason Barclay Jean-Paul Barker Ingrid Benning Valerie Bobinski Gordon Byrne Leo Carteri Fred Chriest Patrick Corbin Glynn Currie **Cort Dogniez** Scott Farguharson Al Fournier David Gold **Delores Haberman** G.W. Hanna Robert Henderson John Hunchak Patsy Ippolito Hilton Jay

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Bill Kapphahn Laurel LaBar-Ahmed Mike Lamb **Eugene Lieffers** Gerald Mamer Robert McLarty Jim Piche Randy Porterfield Don Prokop Rabin Ramanjooloo Robert Reimche Rick Sanderson Gordon Schmiedge Bill Shumay Garry Sibley **Bryce Smith** Al Subchyshyn Pierre Tinant Warren Wessel **Chris Weston** Dale Zakowsky Brent Zapshala

Considerations in Acquiring Resources

The following list of resources for middle level science is centred around the philosophy of resource-based learning in which a variety of resources, rather than one set of textbooks is used to support the curriculum.

For middle level science, the purchase of a class set of textbooks is neither desirable nor recommended.

Before ordering materials, several factors need to be considered:

Educators are encouraged to move away from a single textbook approach to teaching into resource-based learning, thus providing students with opportunities to interact with a wide range of current media in a variety of learning situations. The resources recommended in this bibliography include kits, software, videotapes, and various print media. In addition, it is important that human resources be called upon from the community to enrich the student learning experiences. Saskatchewan Education is aware of the challenge that resource-based learning poses to educators. Because of ever-changing information and budget constraints, educators are faced with difficult decisions and often request guidance on how to implement resource-based programs. When using this bibliography as a selection aid, educators may find the following suggestions to be helpful:

Background Review

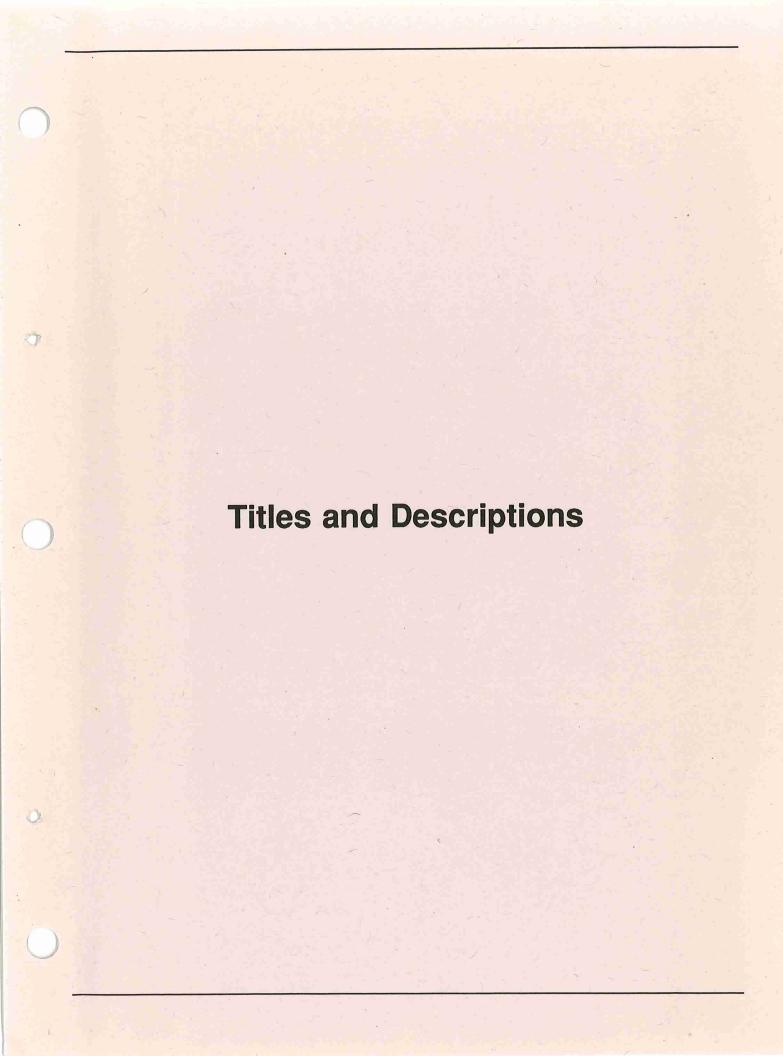
- The school board's selection policy should be reviewed.
- Materials on bias and resource-based learning should be consulted. For example, the Saskatchewan Education publications Diverse Voices and Selecting Fair and Equitable Learning Materials could be reviewed.

Analyzing Present Resources

- The bibliography should be cross-referenced with the school resource centre catalogue to identify and take note of resources already acquired.
- Materials in the present collection should be assessed for appropriate scope and sufficient number of resources, based on the needs of the curriculum, students and teachers. Considerations of needs include:
 - (i) student and teacher background, interests and abilities;
 - (ii) reflection of curriculum philosophy; and,
 - (iii) the accuracy of information, currency and bias, reading level, cultural relevance, adaptability and versatility of resources.

- Before purchasing any of the listed resources, Saskatchewan Education recommends that
 educators preview the resources and select the ones that will best meet their needs. Preview
 policies vary from company to company, but if inappropriate materials have to be returned, they
 must be in saleable condition. The Book Bureau will not provide preview copies, but will allow
 materials to be returned. A 20% restocking fee of up to \$2.00 per returned item will be charged,
 however, so it is advisable to order only one copy to review before placing quantity orders.
- The Book Bureau will special order materials listed in the bibliography in cases where the materials are not presently stocked by the Book Bureau.

It is hoped that these practical guidelines will assist educators in developing a highly useful, suitable collection of resources which meets the needs of the students and teachers in their community.



Acid Rain: The Invisible Threat (Videotape). (The Earth Science Video Library) McIntyre Media Ltd. (MCI), 1992. 20 min. Order no. 849000-21A3 (\$89.00 teacher's guide included)

This video will help students understand the processes that lead to and create the ecologic damage brought on by rain. Expert interviews, exciting on-location footage and computer animation clearly explain how acid rain affects forests, lakes and the human environment.

Suggested Use:

SCI. 9 - Atmosphere

The Acme School of Stuff (Videotape). TV Ontario (MHP), 1988. 13 - (24 min.) programs. Dup. order no. V3325-37 (BB) Order no. BB 6329 (\$2.90 teacher's guide)

The various programs explore the basic principles upon which everyday items operate and show what makes them work.

Title	Topic	Dup. order no.
Program 1	Cassette tapes, chocolate & microwave ovens	V3325
Program 2	Telephones, sewage treatment & video	V3326
Program 3	Batteries, water and fuel injection	V3327
Program 4	Records, neon and the cathode-ray tube	V3328
Program 5	Light bulbs, the Canadian Standards Association and mode	ms V3329
Program 6	Electricity, glass bottles and brakes	V3330
Program 7	The history, operation, manufacturing & testing of the toilet	V3331
Program 8	Cable television, the subway and engineering	V3332
Program 9	Traffic signals, a natural gas pipeline and alternating curren	t V3333
Program 10	Digital computers, folding paper cartons and the electric sha	aver V3334
Program 11	Electronics, the body shop and coin units vending machines	s V3335
Program 12	Composite substances, piano rolls and automobile alignment	nt V3336
Program 13	Engines, wire and satellites	V3337
Suggested Us	se: SCI 9 - Using Electricity SCI 9 - Chemistry & You	
	SCI 8 - Energy Resources in Saskatchewan SCI 8 -	Earth & Space
	SCI 7 - Structure & Design	
	SCI 7 - Force & Motion	

Alaska Science Nuggets (Print-Non-Fiction). Davis, Neil. Geophysical Institute, University of Alaska (UALP), 1982. 233 p. ISBN 0-685-05558-2 (\$15.95 hdc. U.S.)

A collection of articles from *Alaska Science Forum*, this book is a valuable source of information and ideas for investigations.

Suggested Use:

SCI 9 - Diversity of Life|SCI 8 - The Moving Crust|

SCI 7 - Renewable Resources in Saskatchewan

America in Space: The First 25 Years (Kit). Finley-Holiday Films/Space Slides (WAR). 80 slides & 1 audiocassette Order no. 276-0050 (\$40.80)

A summary of the major steps in space technology and exploration by the U.S.A. is provided.

Suggested Use:

SCI 8 - Earth & Space

the removal of animals from the classroom in a sensitive and environmentally friendly manner when specific projects are over. The information is well organized and descriptive. The combination of illustrations and photographs add to the appeal. The material is strong in the support of the Dimensions of Scientific and Technical Skills, the Values that Underlie Science and Key Science Concepts.

Suggested Use:

SCI 9 - Teacher Reference|SCI 8 - Teacher Reference| SCI 7 - Teacher Reference|SCI 6 - Teacher Reference

Atlas of the Environment (Print-Non-Fiction). Nelson Canada (NEL), 1991. 96 p. ISBN 0-17-602677-0 (\$24.99 hdc.)

This atlas describes how different factors affect life on earth and how people and animals live in the various ecosystems. Ways to improve the planet are also described. The book is well illustrated with maps, graphs and tables which can easily be used by students. This may be used as a general student reference book for those doing research on environmental topics. Included are a table of contents, glossary, bibliography and an index.

Suggested Use:

SCI 9 - General Reference|SCI 8 - General Reference|

SCI 7 - General Reference SCI 6 - General Reference

Other Uses:

Social Studies

Atmospheric Science. Vol. 1 (Videodisc). Coronet/MTI Film & Video (CFV), 1991. 14 min. Order no. COPR33035VD (\$249.00)

Contents: 1 disc, 1 discussion guide

"Winds and Air Currents" plus "The Earth's Atmosphere" comprise the contents of this videodisc. Bar codes with the review questions and masterscript provide immediate access to the information. A good explanation of weather phenomena is presented.

Suggested Use:

SCI 9 - The Atmosphere

Atmospheric Science. Vol. 3 (Videodisc). Coronet/MTI Film & Video (CFV), 1991. 28 min. Order no. COR33037VD (\$249.00)

A good explanation is presented in the programs "Weather Systems in Motion" and "Violent Storms" which make up this volume. Worthwhile teachers' guides come with the series.

Suggested Use:

SCI 9 - The Atmosphere

Atoms and Cells (Print-Non-Fiction). Bender, Lionel. (Through the Microscope). Gloucester (NEL), 1990. 32 p. ISBN 0-531-17219-8 (\$16.50 hdc.)

Text and photographs introduce microscopic plant and animal life, viruses, microspores, and other forms of life which can only be viewed through a microscope. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 7 - Microorganisms

Blue Planet: A Portrait of Earth (Print-Non-Fiction). Dotto, Lydia. Sue Katz (MHR), 1991. 63 p. ISBN 0-07-551397-8 (\$24.95 pbk.)

The *Blue Planet* has extraordinary full colour photographs and breath-taking images based on the Imax production by the same name. The topic is the planet Earth as a place of constant change by natural and human forces. Preservation of the planet is the focus. This book clearly supports the curriculum in its focus on critical and creative thinking, technological literacy, and other CEL's. DSL's are also clearly addressed. This material is highly recommended.

Suggested Use:

SCI 8 - Earth & Space

Blue Ribbon Science Fair Projects (Print-Non-Fiction). Iritz, Maxine Haren. TAB (MHR), 1991. 120 p. ISBN 0-8306-7615-5 (\$23.95 hdc.) ISBN 0-8306-3615-3 (\$13.95 pbk.)

Readers will learn about the organization and development of school science projects from their beginnings as vague concepts, to the experiment and testing stages, and finally to completion and display stages. Helpful hints are provided. Included are table of contents, glossary, bibliography and an index.

Suggested Use:

SCI 9 - Science Challenge

Other Uses:

Science 10

The Book for Women Who Invent or Want To (Print-Non-Fiction). Wallace, Elizabeth. The Women Inventors Project (WIP), 1987. 122 p. No order no. (\$15.00 pbk.)

Information is presented on what a person would need to know to bring an invention from the idea stage through market research, planning, prototype and financing to packaging and marketing. The aim of the book is to guide and support new inventors by providing complete information, moving from example to theory and from known information to new experience. Inventors or other interested readers are encouraged to develop networks and support one another. There is a section on group learning plus appendices with resource information. Included are a table of contents and an index.

Suggested Use:

SCI 9 - Science Challenge | SCI 8 - Science Challenge

Other Uses:

Senior Science

A Book of Weather Clues (Print-Non-Fiction). Kaiser, Diane. Fitzhenry & Whiteside (FHW), 1986. 64 p. ISBN 0-88902-926-1 (\$7.95 pbk.)

Aspects of weather forecasting and folklore are presented in this little book. This resource could be used to add fun to science classes. Included is a table of contents.

Suggested Use:

SCI 9 - The Atmosphere

Other Uses:

Elementary Science

Botany: 49 Science Fair Projects (Print-Non-Fiction). Bonnet, Robert L. and G. Daniel Keen. TAB (MHR), 1989. ISBN 0-8306-3277-8 (\$13.95 pbk.)

As the title implies, this book contains ideas and descriptions of botany projects. These could be used as science fair projects, or as investigations incorporated into the regular units in science. Through investigations, the DSLs and factors are made clear to the students. The variety of investigations, background information, and suggestions for further activities are excellent.

Suggested Use:

SCI 8 - Plant Growth

CEPUP (Chemical Education for Public Understanding Program (Print-Non-Fiction). Addison-Wesley (BB), Coilbound.

Teachers' manuals in this series include:

Determining Threshold Limits	Order no. BB 6604	(\$23.00)	SCI 9 - Risks & Limits
Investigating Groundwater:			
The Fruitvale Story	Order no. BB 6606	(\$21.00)	SCI 8 - Solutions
Risk Comparison	Order no. BB 6605	(\$23.00)	SCI 9 - Risks & Limits
Chemical Survey & Solutions and			
Pollution	Order no. BB 6607	(\$21.00)	SCI 9 - Chemistry & You
			SCI 8 - Solutions
Plastics in Our Lives	Order no. BB 888	(\$23.24)	SCI 9 - Chemistry & You
The Fruitvale Story Risk Comparison Chemical Survey & Solutions and	Order no. BB 6605 Order no. BB 6607	(\$23.00) (\$21.00)	SCI 9 - Risks & Limits SCI 9 - Chemistry & Yo SCI 8 - Solutions

The principle on which these modules were developed is that learning which is not connected to the student's lives and made meaningful to them is not lasting learning. Principles of chemistry are introduced and explained in the context of their importance to North American society. Each module has extensive background information for the teachers, innovative activities, and ready-to-photocopy student activity and information sheets.

Suggested Use:

SCI 9 - Risks & Limits|SCI 9 - Chemistry & You|SCI 8 - Solutions

Chemical Reactions. Teacher's Guide (Print-Non-Fiction). Barber, Jacqueline. (Great Explorations in Math and Science (GEMS). Lawrence Hall of Science (LHS), 1986. 24 p. No order no. (\$7.50 U.S.)

Barber deals with laboratory safety and procedures as well as discussing two chemical reactions. There is a good activity for an exothermic reaction. One would have to modify the material because of the excessive use of imperial measurements. Included is a table of contents.

Suggested Use: SCI 9 - Chemistry & You

Chemically Active! Experiments (Print-Non-Fiction). Cobb, Vicki. J. B. Lippincott (BORE), 1985. 154 p. Order no. B60536 (\$17.45 hdc.)

A series of relatively simple experiments using household chemistry items are described. Brief basic theoretical background for chemistry is given. The Processes of Science and STSE Interrelationships are supported. The material is non-metric and non-quantitative.

Suggested Use:

SCI 8 - Solutions|SCI 6 - Chemicals & Reactions

City Safaris (Print-Non-Fiction). Shaffer, Carolyn and Erica Fielder. Sierra Club (BORE), 1987. 185 p. Order no. 68468-00 (\$12.44 pbk.)

Teachers are provided with a guide for taking "ecology walks" in the city. Numerous treasure hunts, nature games and various imaginative activities are presented along with useful background information. This is an excellent resource for teachers! It has the potential to guide teachers to activities in all Dimensions of Scientific Literacy. Included are a table of contents and a bibliography. Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 8 - Adaptation & Succession|

SCI 7 - The Basics of Life

Cockroaches and Things: A Manual for the Care and Maintenance of Living Organisms (Print-Non-Fiction). Murawsky, V. H. and R. J. Bandurka. Saskatchewan Education (BB), 1983. 47 p. Order no. BB 6086 (\$2.00 pbk.)

Living organisms should be available in the science classroom. This manual is an attempt to meet the needs of teachers who are reluctant to keep live organisms because the teachers do not know where and how to procure organisms, to maintain and care for them as well as to have a physical setting that is suitable for the organisms.

Suggested Use:

SCI 9 - Teacher Reference | SCI 8 - Teacher Reference |

SCI 7 - Teacher Reference | SCI 6 - Teacher Reference

Other Uses:

Biology 20/30

The Complete Science Fair Handbook (Print-Non-Fiction). Fredericks, Anthony D. and Isaac Asimov. Good Year (GAG), 1990. 82 p. ISBN 0-673-38800-X (\$12.55 pbk.)

Introducing the science fair to parents, suggestions for topics, how to make a science fair successful, presenting and judging projects as well as a student's planning guide are provided. This resource is considered to be excellent for beginners at science fairs.

Suggested Use:

SCI 9 - Science Challenge|SCI 8 - Science Challenge|

SCI 7 - Science Challenge SCI 6 - Science Challenge

Other Uses:

Elementary Science

Conceptual Physics: A High School Physics Program. 2nd ed. (Print-Non-Fiction). Hewitt, Paul G. Addison Wesley (ADD), 1992. 660 p. ISBN 0-201-28651-X (\$56.76 hdc. student edition) ISBN 0-201-28652-X (\$62.76 hdc. teacher's edition)

This recommended resource is a very readable text with many diagrams which help simplify complex concepts. It has a unique approach to physics with very little emphasis on algebra and math problem solving. It is highly concept oriented. This is considered a "must" for Physics students and teachers who have difficulty reading traditional texts. The supplementary material is highly recommended. It is a good to excellent support for the DSLs with the exception of the Values That Underlie Science.

Suggested Use:

SCI 9 - Using Electricity|SCI 9 - Fluids & Pressure|SCI 9 - Teacher Reference

Other Uses:

Physics 20/30

Consumer Chemistry: Projects for Young Scientists (Print-Non-Fiction). Newton, David E. (Projects for Young Scientists). Franklin Watts (NEL), 1991. 112 p. ISBN 0-531-11011-7 (\$17.50 hdc.)

A fine title containing experiments that examine the chemistry of such common items as food, cosmetics, detergents, soil, antacids, and fibres. Experiments are clearly detailed with many illustrations showing how to arrange the equipment. Black-and-white photographs depict male and female students using proper laboratory techniques. Safety procedures are well explained, and warnings or steps involving potentially dangerous chemicals are boxed at the beginning of relevant experiments. A section on special laboratory techniques, such as titration and water baths is included.

Suggested Use:

SCI 9 - Chemistry & You|SCI 8 - Consumer Product Testing|

SCI 7 - Saskatchewan - The Land

Other Uses:

Secondary Science | Science 10

Disk 4 - Break the Code/Bird Balance

Disk 5 - Cat and Mouse/Pendulums

Discover! with six back-up disks\$225.00 U.S.

One-Pack - Contains one of the individual disks listed above with back-up,

one manager disk, and support material including reproducibles \$160.00 U.S.

The program contains ten multi-level problems that encourage students to plan, predict, experiment, test, and analyze results. There are easy, moderate, and difficult levels in all ten problem areas.

Suggested Use:

SCI 9 - General Reference | SCI 8 - General Reference |

SCI 7 - General Reference | SCI 6 - General Reference

Other Uses:

Secondary Science

Do Animals Dream? (Print-Non-Fiction). Joyce Pope. Viking Kestral (PBC), ISBN 0-670-81233-1 (\$24.95 hdc.)

Pope answers questions commonly asked by young students about living plants, animals and insects. This material will motivate student reading.

Suggested Use:

SCI 9 - General Reference | SCI 8 - General Reference |

SCI 7 - General Reference | SCI 6 - General Reference

Down to Earth: Managing Our Natural Resources (Print-Non-Fiction). Carey, Bonnie, et al. The Ontario Newspaper in Education Assoc. (LPL), 1990. 57 p.

This resource is free if teachers purchase 100 copies of the newspapers at \$.20 each. Some teachers may find it appropriate to use the fact sheets as a springboard for discussion, prior to studying the news story which deals with a conservation-related issue. Others may prefer to start with the news story as an introduction to a particular topic. The four units featured are fish & wildlife, forest, water, and soil.

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 8 Adaptation & Succession|

SCI 7 - Renewable Resources in Saskatchewan

Earth Day Every Day: Waste Management (Print-Non-Fiction). Sakamoto, Evannah and Janis Gershman. McGraw-Hill Ryerson (MHR), 1991. 60 p. ISBN 0-07-551278-5 (\$21.00 hdc.)

This teacher's resource contains activities and games. The intent of the material is to move children toward action so that we as a species can live sustainable, environmentally balanced lives for generations to come. Purchasers of the material are granted permission to reproduce the material for classes within the school.

Suggested Use:

SCI 8 - Energy Resources in Saskatchewan

Earthcycles and Ecosystems (Print-Non-Fiction). Savan, Beth. Kids Can Press (UTP), 1991. 96 p. Order no. 1-97687 (\$7.96 pbk)

A variety of environmental issues and topics such as earthcycles of air, water, and soil plus what happens when these cycles are disturbed are included in this Canadian resource. The text is well illustrated and provides many hands-on activities to capture students' interest. This text is an

Education Goes Outdoors (Print-Non-Fiction). Johns, Frank A., Kurt Allen Liske, Amy L. Evans. Addison-Wesley (ADD), 1986. 188 p. ISBN 0-201-20471-1 (\$28.95 pbk.)

An activity based resource, this material could be easily adapted to Saskatchewan's conditions. There is a wide range in the complexity of the activities, therefore the material is suitable for students of varying abilities. Included are a table of contents and bibliography.

Suggested Use:

SCI 9 - Science Challenge|SCI 7 - Basics of Life

Electricity and Magnetism (Print-Non-Fiction). Jennings, Terry. (The Young Scientist Investigates). Oxford (OUP), 1982. 32 p. ISBN 0-19-918040-7 (\$9.95 pbk.) ISBN 0-19-918046-6 (\$11.95 hdc.)

A general overview of electricity production, safety and transmission is given. The style is interesting and colourful but elementary and therefore could be useful for remedial purposes. Included are a table of contents and a glossary.

Suggested Use:

SCI 9 - Using Electricity

Energy (Print-Non-Fiction). Jennings, Terry. (The Young Scientist Investigates). Oxford (OUP), 1984. 32 p. ISBN 0-19-918159-4 (\$9.95 pbk.) ISBN 0-19-918165-9 (\$11.95 hdc.)

Various forms of energy are pictorially presented. There is a low reading level in this series. Included are a table of contents and a glossary.

Suggested Use:

SCI 6 - Energy in our Lives

Energy and Society (Videotape). Hawkhill (HAI), 1990. 35 min. (\$69.00 U.S.)

Part 1 gives a short history of energy and society. Part 2 discusses energy for today and tomorrow. This video provides excellent support for STSE Interrelationships. It is a very interesting presentation that promotes critical thinking.

Suggested Use:

SCI 9 - Using Electricity|SCI 9 - Teacher Reference|

SCI 8 - Energy Resources in Saskatchewan|SCI 8 - Teacher Reference

Other Uses:

Physics 20|Science 10|Middle Level Science Teacher Reference

Energy Projects for Young Scientists (Print-Non-Fiction). Gardner, Robert. (Projects for Young Scientists). Franklin Watts (NEL), 1987. 127 p. ISBN 0-531-10338-2 (\$17.50 hdc.)

Instructions are given for a variety of projects and experiments related to solar, thermal, electrical, kinetic, and potential energy.

Suggested Use:

SCI 9 - Using Electricity SCI 8 - Energy Resources in Saskatchewan

SCI 7 - Renewable Resources in Saskatchewan

The Energy Resource Game (Game). Taylor, J. Boreal Laboratories (BORE), 1991. Order no. 63681-00 (\$18.70)

Students use "energy resource process," "act of god," "natural disaster" and "resource depletion" cards to better understand energy use. Included are table of contents, glossary, bibliography and an index.

Suggested Use:

SCI 9 - Using Electricity SCI 8 - Energy Resources in Saskatchewan

The Epicurean Laboratory: Exploring the Science of Cooking (Print-Non-Fiction). Seelig, Tina L. W. H. Freeman (IRW), 1991. 163 p. ISBN 0-7167-2162-7 (\$16.20 pbk.)

Seelig explores the scientific principles involved in the art of cooking. A recipe follows each chapter. The topics range from proteins to solutions to acids and bases. This is a good book for students who love cooking and for teachers who want to make science classes more interesting. It should be noted that as with each of the sections, following the wine section, a recipe is given involving the use of wine. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 9 - Chemistry & You|SCI 8 - Solutions|SCI 7 - Microorganisms

Other Uses:

Chemistry 20|Science 10

Evidence of Energy: An Introduction to Mechanics. Book Two. (Print-Non-Fiction). Gartrell, Jack E. and Larry E. Schafer. National Science Teachers' Association (NSTA), 1990. 187 p. ISBN 0-87355-092-7 (\$17.50 pbk. U.S.)

Topics such as projectile motion, work, energy, machines, torque, and centre of gravity are introduced with the first-time student of mechanics in mind. The informal, hands-on activities use readily-available materials and a variety of instructional techniques to combat common misconceptions and make the sometimes intimidating subject of mechanics immediately accessible and fun for teachers and students.

Suggested Use:

SCI 7 - Force & Motion

Experimenting With Air and Flight (Print-Non-Fiction). Walker, Ormiston H. (A Venture Book). Frankling Watts (NEL), 1989. ISBN 0-531-10670-5 (\$16.50 hdc.)

This book is full of various activities that individual students could complete successfully. It also has some activities which students in the middle years would find challenging. Each chapter explains the principle, then provides a project to demonstrate the principle. In developing the Nature of Science, a brief history of flight is provided. The Key Science Concepts are shown by light, thrust, gravity and drag. Moving from simple activities and principles of flight to advanced activities and principles shows the Processes of Science. Flight in nature and in human-made technology is demonstrated. For the Science Related Interests and Attitudes, students will be motivated to read this book. Included are a table of contents, bibliography and an index.

Suggested Use:

SCI 7 - Force & Motion

Experimenting with Batteries, Bulbs and Wires (Print-Non-Fiction). Ward, Alan. Dryad (IRW), 1986. 48 p. ISBN 0-8219-96299 (\$17.53 hdc.)

Good as a student resource for projects dealing with electricity, this resource provided the diagrams and instructions for making simple electrical devices with easily obtained material. The illustrations are simple enough to encourage students to undertake the projects. Included are a table of contents and an index.

Suggested Use:

SCI 9 - Using Electricity

Experimenting with Magnetism (Print-Non-Fiction). Ward, Alan. Dryad (IRW), 1987. 48 p. ISBN 0-8219-96636 (\$17.53 hdc.)

Numerous activities which a student could try with minimal supervision are given in this excellent

Faulting and Folding (Videotape). (The Earth Science Video Library). McInytre Media Ltd. (MCI), 1990. 15 min. Order no. 843000-21A3 (\$89.00 teacher's guide available)

This videotape explores the processes that result in folding and faulting of the Earth's crust.

Suggested Use:

SCI 8 - The Moving Crust

50 Simple Things Kids Can Do To Save the Earth (Print-Non-Fiction). The Earth Works Group. Andrews and McMeel (GAG), 1990. 156 p. ISBN 0-8362-2301-2 (\$9.95 pbk.)

How specific things in a child's environment are connected to the rest of the world, how using these things affects the planet, and how the individual can develop habits and projects that are environmentally sound are explained in this publication. These ideas could be used for SRC project. Included is a table of contents.

Suggested Use:

SCI 9 - Science Challenge | SCI 9 - Saskatchewan-Environment |

SCI 8 -Science Challenge|SCI 7 - Science Challenge|SCI 6 - Ecosystems

A Fine Science 1985 Series (Videotape). Saskatchewan Education/Canadian Broadcasting Corporation (MHP), 1985. Dup. order no. V2309 - V2321 (Programs 1-13) Order no. BB 5908 (\$3.35 pbk. teacher's guide)

The series, produced in 1985 and 1986, looks at the state of science and technology in Saskatchewan. A variety of areas is examined--medicine, communications, natural resources, agriculture, power systems, water management, and pure science research. This material is useful for career awareness, and as a link between what the students are learning and their lives in this province. Excellent support for developing the Common Essential Learnings and the Dimensions of Scientific Literacy is provided.

Suggested Use:

SCI 9 - Saskatchewan-The Environment|SCI 9 - Chemistry & You

SCI 9 - The Atmosphere|SCI 8- Energy Resource in Saskatchewan| SCI 8 - Earth & Space|SCI 7 - Renewable Resources in Saskatchewan|

SCI 7 - Saskatchewan-The Land/SCI 7 - Structure & Design

Other Uses:

Biology 20/30, Chemistry 30, Physics 30

A Fine Science 1986 Series (Videotape). Saskatchewan Education/Canadian Broadcasting Corporation (MHP), 1986. Dup. order no. V2417-V2429 (Programs 1-13) BB order no. 5909 (\$3.35 pbk. teacher's guide)

See annotation above.

Suggested Use:

SCI 9 - Saskatchewan-The Environment|SCI 8 - Earth & Space|

SCI 8 - The Moving Crust|SCI 8 - Energy Resources in Saskatchewan|

SCI 7 - Saskatchewan-The Land

Fishwheels and How to Build Them (Print-Non-Fiction). Lynch, Kathleen. Adult Literacy Laboratory (MARS), 1979. 45 p. (\$5.50 pbk. U.S.)

Technology involved in the use and construction of a fishwheel is described. Types of fishwheels, variations in construction, how a fishwheel works, plus launching and anchoring the fishwheel are some of the topics covered. U.S. measures are used. There is a historical component in the

science challenge purposes. Included are a table of contents, bibliography and an index.

Suggested Use:

SCI 9 - Diversity of Life|SCI 8 - Consumer Product Testing|

SCI 6 - Growth & Development|SCI 6 - Human Body Control Systems

Other Uses:

Science 10

Force and Movement (Print-Non-Fiction). Taylor, Barbara. (Science Starters). Franklin Watts (NEL), 1990. ISBN 0-531-14081-4 (\$15.50 hdc.)

The format of this material is bright, appealing and modern. There is a very low reading level. The resource would be suitable for use with students needing remedial work. This is more an information presenting book rather than inquiry learning as some activities give the outcome before a student begins. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 7 - Force & Motion

Forces and Machines (Print-Non-Fiction). Atwater, May, et al. (Macmillan/McGraw-Hill Science). Macmillan/McGraw Hill (BB), 1993. 90 p. Order no. BB 6608 (\$13.05 pbk.)

This title is one of 42 modules in a series designed to support science teaching in K-8. Connections to literature, careers, and other areas of study make this activity-centred resource useful in the middle level classroom. There is strong support for the Dimensions of Scientific Literacy. This book focuses on how machines are used to transfer and alter the magnitude of force and create motion. An attractive book, it includes a table of contents, glossary and an index.

Suggested Use:

SCI 7 - Force & Motion

Forces: Building A Cantilever Bridge (Print-Non-Fiction). Raitt, Gordon. (Physics in Action). Cambridge University (IRW), 1987. 57 p. ISBN 0-521-31084-9 (\$7.56 pbk.)

Forces: Building a Cantilever Bridge describes physics and engineering in building a bridge, from planning through construction, to the completed structure with vehicles on it. This resource provides a wide range of examples of balanced forces and unbalanced forces in action, up to high school physics level. Questions and numerical problems are included. This is a British resource. Included are a table of contents and an index.

Suggested Use:

SCI 7 - Structure & Design|SCI 7 - Teacher Reference

Forecasting the Weather (Software). (Weather Series). Lawrence Productions/MCE (MCE), 1988. (\$59.95 U.S.)

System requirements: Apple II, 5 1/4", Colour monitor

Contents: Disc and teacher's guide

Forecasting the Weather helps students gain an understanding about how the water cycle, air movement, temperature, pressure, and humidity all work together to bring us the weather. Students interact with the program in making their own short range weather forecasts, and in discussing various clues to use when forecasting the weather. A printout of some of these clues may be obtained. A list of vocabulary and one of references is provided.

Suggested Use:

SCI 9 - The Atmosphere

- 1. To foster awareness and concern for our environment air quality, disposal of waste, water quality, energy conservation.
- 2. To provide the opportunity for every elementary and secondary level student in Canada to participate in Global Earth Day.
- 3. To identify environmental problems and address possible solutions.
- To encourage student-generated initiatives aimed at waste reduction, recycling and re-use of products.
- 5. To minimize the creation of waste and wherever possible to compost and recycle.

Give Earth A Chance comes in loose-leaf format and contains the following sections: Teacher's Manual, Schedules, Glossary, Quotes (from famous people), Target Date (comparing various newspapers printed on the same date), Composting and Supplements.

Suggested Use:

SCI 8 - Energy Resources in Saskatchewan|

SCI 7 - Renewable Resources in Saskatchewan|SCI 6 - Energy in Our Lives

Other Uses:

Social Studies 6

Global Atlas (Atlas). Draper, Graham. Gage (BB), 1991. 96 p. Order no. BB 6114 (\$25.15 coilbound student edition) Order no. BB 1006 (\$40.85 loose-leaf, teacher's resource, 229 p.)

This colourful, oversized atlas for middle level students offers beautiful photos, maps and charts which provide much valuable information. A section on the physical world includes facts about earthquakes, volcanoes and climate. A "Life on Earth" section includes information about ecosystems, grasslands, deserts, forests. A section on "Our Human World" offers data on resources, population, food production, tourism and immigration. A regional section examines continents and subcontinents. Also, a section on Canada explores human and physical patterns, industries and regions. The teacher's resource offers a wide variety of instructional approaches based on the material in the student atlas. It provides reproducible outline maps, activity pages and graph blanks. It also includes a list of addresses where additional materials can be obtained.

Suggested Use:

SCI 8 - The Moving Crust|SCI 6 - Earthquakes & Volcanoes

Other Uses:

Social Studies 6

Global Atlas (Print-Non-Fiction). Draper, Graham. Gage Educational (GAG), 1991. 196 p. ISBN 0-7715-8170-X (\$30.00 pbk.)

A practical purchase, this is a good atlas with many good charts and graphs depicting various aspects of life. There are five major divisions in the atlas covering topics such as earthquakes and volcanoes, climate, ecosystems, renewable resources, non-renewable sources of energy and population patterns. One section is devoted specifically to Canada. Included are a table of contents, glossary and an index. The teacher's resource package is useful.

Suggested Use:

SCI 9 - Saskatchewan-Environment

SCI 8 - Energy Resources in Saskatchewanl

SCI 7 - Saskatchewan-The Land|SCI 6 - Ecosystems

Other Uses:

Social Studies

Global Science: Energy, Resources, environment (Print-Non-Fiction). Christensen, John W. Kendall/Hunt (KHP), 1991. 699 p. ISBN 0-8403-4657-3 (\$31.90 student edition hdc. U.S.) ISBN 0-8403-4659-X (\$39.90 teacher's guide U.S.)

A good resource book that has many activities that could be used for independent learning, especially

Heat (Print-Non-Fiction). Jennings, Terry. (The Young Scientist Investigates). Oxford University (OUP), 1982. 32 p. ISBN 0-19-918042-3 (\$9.95 pbk.) ISBN 0-19-918048-2 (\$11.95 hdc.)

This material would be useful as an introduction or review on topics of energy, heat, and the conservation of heat. This series has a lower reading level than many middle level resources. Included are a table of contents and a glossary.

Suggested Use:

SCI 7 - Temperature & Heat

Other Uses:

Elementary Science

Heat and Temperature (Print-Non-Fiction). Raitt, Gordon. (Physics in Action). Cambridge University (IRW), 1987. 58 p. ISBN 0-521-31087-3 (\$7.56 pbk.)

Raitt does a good job of relating concepts of heat and energy to other topics such as temperature and efficiency of energy conversion. This resource is good for scientific literacy development in this area. The author has provided sections on friction and stability that deal with such things as movement of bicycles and assessing running shoes to fit the activity. The conceptual approach to physical education is used. Included are a table of contents and an index.

Suggested Use:

SCI 7 - Temperature & Heat

Heat and Temperature Set (Kit). Boreal Laboratories (BORE), Order no. 64372-00 (\$145.20)

Contents: Ball and ring apparatus, Compound Bar, Gas Convection Apparatus, Pulse Glass Radiometer, Calorimeter, Specific Heat Specimens (Set of 5), Mercury Thermometer (-20 degrees to 110 degrees C)

The *Heat and Temperature Set* could be used to demonstrate the effects of heat on various solids, liquids, and gases, allowing students to explore conduction, convection, radiation, and specific heat. Sample activities are included:

Suggested Use:

SCI 7 - Temperature & Heat

Other Uses:

Physics 20

Houses of Bark: Tipl, Wigwam and Longhouse (Print-Non-Fiction). Shemie, Bonnie. (Native Dwellings: Woodland Indians). Tundra (UTP), 1990. 24 p. ISBN 0-88776-246-8 (\$13.95 hdc.)

Shemie provides a look at housing structures of various Aboriginal nations. Discussion includes materials used for building, tools needed and special features of each structure. Other uses of bark are also mentioned. Other titles in the series include: *Houses of Snow* ISBN 0-88776-269-7, *Skin and Bones* ISBN 0-88776-240-9 (\$13.95 hdc.)

Suggested Use:

SCI 7 - Structure & Design

How Do They Do That (Print-Non-Fiction). Sutton, Caroline. Hilltown (BORE), 1981. Order no. 64224-00 (\$14.45 pbk.)

A little information is given about a lot of topics. This title is written for popular reading and would be interesting for students to have available in their spare moments. Teachers of younger students may find it useful for motivational purposes. This is an American book with American references. There is no organizational structure to the book to tie topics together.

Suggested Use:

SCI 9 - General Reference

How To Write Science Fiction & Fantasy (Print-Non-Fiction). Card, Orson Scott. Writer's Digest Books (MHR), 1990. 140 p. ISBN 0-89879-416-1 (\$18.95 pbk.)

This resource will be useful for science writing in Middle Level Science.

Suggested Use:

SCI 6-9 - All Units

Hurricane: Earth's Greatest Storm (Videotape). (The Earth Science Video Library). McIntyre Media Ltd. (MCI), 1992. 20 min. Order no. 822200-21A3 (\$89.00)

Using live-action video, animation and computer graphics, witness the incredible energy unleashed by one of nature's most dramatic weather systems. See actual footage of hurricanes including dramatic scenes of Hurricane Hugo's storm track across the Atlantic Ocean to its landfall.

Suggested Use:

SCI 9 - The Atmosphere

Indian Handcrafts (Print-Non-Fiction). Wilbur, C. Keith. Globe Pequot (ALL), 1990. 135 p. ISBN 0-87106-496-0 (\$18.95 pbk.)

This is an interesting and informative guide to making crafts using traditional Aboriginal techniques. Objects featured include weapons, clothing, containers, toys and structures. Drawings and decorative print detail the materials, tools and processes used in making the crafts, and wherever possible, define the era and peoples using the items. Included are a table of contents, bibliography and an index.

Suggested Use: Other Uses:

SCI 7 - Structure & Design Biology 20|Physics 20|Arts Ed.

Indian Uses of Native Plants (Print-Non-Fiction). Murphy, Edith van Allen. Meyerbooks (MEY), 1990. 81 p. ISBN 0-916638-15-4 (\$6.95 pbk. U.S.)

As the title suggests, this material provides the reader with information about the uses and applications of a variety of plants and wild animals. Some specific uses mentioned are basketry, beverages, medicinal plants, ceremonials and magic, bows and arrows and tanning hides. Included are a table of contents and an index.

Suggested Use:

SCI 9 - Diversity of Life

Other Uses:

Biology 20|Chemistry 20

The Informazing Resource Book (Print-Non-Fiction). Clyne, Margaret and Rachel Griffiths. Rigby (GIN), Order no. R04839 (\$24.95 hdc.)

While this is mainly a resource for elementary science, many good ideas are presented for reading and writing in middle level science. Only the teacher reference resource is recommended from the set.

Suggested Use:

All units

Other Uses:

Elementary Science - Teacher Reference

Iroquois Use of Malze and Other Food Plants (Print-Non-Fiction). Parker, A.C. (Iroquois reprints). Iroqrafts (IRO), 1920 reprint 1983. 120 p. ISBN 0-919645-08-9 (\$6.95 pbk.)

Material in the text discusses maize and its cultivation. Cooking and eating customs as well as other food plants are mentioned.

Suggested Use:

SCI 8 - Plant Growth

Is Our Food Safe? A Discussion of Crop Protection In a Modern World (Print-Non-Fiction). Faust, Edgar W. Hoechst Canada (HCI), 24 p. (Free of charge)

Hoechst Canada provides answers to the question, "Given the Widespread use of crop protection products in modern agriculture, is our food safe?" The information is divided into three chapters. The first discusses whether the term "natural" is truly synonymous with "healthy". The second summarizes why crop protection products are necessary in today's society, and analyzes the safety of these products to consumers and producers of food. Chapter three looks at the issue of residues and toxicity. This publication gives reasons for why crop chemicals are used, and why they are more important today than ever before.

Suggested Use:

SCI 9 - Risks & Limits

Other Uses:

Chemistry 20/30

I.S.I.S. (Individualized Science Instructional System) (Print-Non-Fiction). Hutton, Glen. Globe/Modern Curriculum (BB), 1989. Teacher's manual for the series. Order no. BB 6603 (\$9.45 pbk.)

This series of modules provides information and activities which help students understand many of the concepts which are considered in the middle level science curriculum. They can be used for independent study by students or student groups, or as an organizing resource for the class for a unit.

•		Resource &	
Modules Disease Defence	Student Edition Order no. BB 6587 \$11.95	Evaluation pbk.	Curriculum Correlation SCI 7 - Basis of Life
Earth Changes	Order no. BB 6589 \$11.95	BB 6590 \$23.70	SCI 7 - Saskatchewan-The Land
			SCI 7 - The Moving Crust SCI 8 - Solutions
Household Science	Order no. BB 6591 \$11.95	BB 6592 \$23.70	SCI 9 - Chemistry & You SCI 7 - Microorganisms,
Tioddonoid Colonido		22 332 4 2,	SCI 7 - Temperature & Heat SCI 8 - Solutions
			SCI 9 - Chemistry & You
Investigating the			
Environment	Order no. BB 6593 \$11.95	BB 6594 \$23.70	SCI 8 - Adaptation & Succession
Energy for Living	Order no. BB 6595 \$11.95	BB 6596 \$23.70	SCI 8 - Energy Resources in Saskatchewan
			SCI 9 - Using Electricity
Science, Technology	•		
and You	Order no. BB 6597 \$11.95	BB 6598 \$23.70	SCI 8 - Energy Resources in Saskatchewan
			SCI 9 - Using Electricity

Janice VanCleave's Biology for Every Kid: 101 Easy Experiments that Really Work (Print-Non-Fiction). VanCleave, Janice Pratt. John Wiley & Sons (WIL/BORE), 1990. 224 p. ISBN 0-471-50381-9 (\$13.95 pbk.) / Order no. 68053 (\$15.55 pbk.)

This is a basic science experiment book designed to teach concepts, terminology and lab methods. Detailed step by step instructions are given in easy to understand terms. Expected results and the inclusion of the scientific explanation for the results make this an excellent resource for teachers working on topics in biology. This is an especially great resource for novice teachers. The experiments will motivate students.

Suggested Use:

SCI 8 - Adaptation & Succession|SCI 8 - Plant Growth|SCI 7 - Basics of Life|

SCI 6 - Human Body Control Systems

Janice VanCleave's Chemistry for Every Kid: 101 Easy Experiments that Really Work (Print-Non-Fiction). VanCleave, Janice Pratt. John Wiley & Sons (WIL), 1989. 232 p. ISBN 0-471-50974-4 (\$32.50 hdc.) ISBN 0-471-62085-8 (\$13.95 pbk.)

A "no mystery" approach is used in stating the purpose, brief procedure, illustration of apparatus, expected outcome and an explanation of the experiments. Emphasis is placed on scientific and technical skills. This would be good for demonstrating scientific principles. It could be a useful motivational resource as students will be attracted to some of the activities. Imperial measures, but with the centigrade scale, are used. Simple illustrations supplement the activities. Included are a table of contents, glossary and bibliography.

Suggested Use:

SCI 9 - Chemistry & You|SCI 9 - Teacher Reference|SCI 8 - Solutions|

SCI 8 - Teacher Reference

Janice VanCleave's Earth Science for Every Kid: 101 Easy Experiments That Really Work (Print-Non-Fiction). VanCleave, Janice Pratt. John Wiley & Sons (WIL/BORE), 1991. 231 p. ISBN 0-471-53010-7 (\$13.95 pbk.) / Order no. 63772 (\$13.14 pbk.)

VanCleave provides good, short experiments which can be done in any classroom with very little material. These activities are good for attention getting and clarifying points in many different areas. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 9 - The Atmosphere SCI 8 - The Moving Crust

SCI 8 - Solutions|SCI 8 - Earth & Space|SCI 7 - Saskatchewan-The Landl

SCI 7 - Structure & Design|SCI 6 - Exploring Space

Janice VanCleave's Physics for Every Kid: 101 Easy Experiments in Motion, Heat, Light, Machines and Sound (Print-Non-Fiction). VanCleave, Janice Pratt. John Wiley & Sons (WIL/BORE), 1991. 241 p. ISBN 0-471-52505-7 (\$13.95 pbk.) / Order no. 63771 (\$13.14 pbk.)

The contents are divided into chapters of experiments that pertain to various areas of physical science. This material would be useful as introductory, review or reinforcement of scientific concepts such as electricity, buoyancy and gravity. This is considered to be a very good reference book with simple materials needed to conduct the experiments. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 9 - Using Electricity|SCI 9 - Fluids & Pressure|SCI 7 - Force & Motion

Other Uses:

Physics 20

Knee High Nature Series (Print-Non-Fiction). Hayley, Diane and Pat Wishart. Knee High Nature (KHN).

The main purpose of this series is to increase awareness and appreciation of nature and to encourage adults to share their knowledge with children, and children to share their sense of wonder with adults. The biology of each subject is discussed in a simple and accurate manner as it applies to Alberta. Animal taxonomy, the stories, activities and crafts are suggested.

Titles in this coil-bound series include:

Knee High Nature: Summer in Alberta
Knee High Nature: Fall in Alberta
Knee High Nature: Winter in Alberta
Knee High Nature: Spring in Alberta
ISBN 0-9693743-1-3 \$15.00 pbk.
ISBN 0-9693743-0-5 \$12.00 pbk.
ISBN 0-9693743-3-X \$14.95 pbk.

Suggested Use:

SCI 8 - Adaptation & Succession|SCI 7 - Basics of Life|SCI 6 - Ecosystems

Other Uses:

Elementary Science

Landscapes: A Guide to the Landforms and Ecology of Southern Saskatchewan

(Print-Non-Fiction). Rowe, J. Stan. Saskatchewan Environment, (Out of Print), 1980. 1 reference manual and 7 booklets (Free pbk.)

This series, now out of print, was used with the former grade 8 Earth Science curriculum and may be in many schools. It is a valuable resource.

Suggested Use:

SCI 8 - Energy Resources in Saskatchewan|SCI 7 - Saskatchewan-The Land

Landscapes Series (Videotape). (MHP), Approx. 30 min each - 7 programs Dup. order no. V3220-V3226

These videos, produced by Kelsey Institute in Saskatoon, these videos give students an understanding of the diversity of landforms, vegetation and wildlife of Saskatchewan.

Titles in this series are: Dup. order no. V3220 The Mountains - Headwaters V3221 The Grasslands - The Great Lone Land V3222 The Cypress Hills - Manatak V3223 The Badlands and River Valleys The Aspen Parklands - The Gentle Wilderness V3224 The Boreal Forest V3225 V3226 The Precambrian Shield

Suggested Use:

SCI 7 - Saskatchewan-The Land

Learning About Weather: A Resource Study Kit (Print-Non-Fiction). Environment Canada (BB), 1989. Order no. BB 882

Produced by Environment Canada, this is a package of information, instructions for constructing instruments to record the weather, and ideas for activities investigating the weather.

Suggested Use:

SCI 9 - The Atmosphere

perspective. Topics covered are, orbiting and the earth's gravity, energy sources for space travel, satellite communications, remote sensing, living and working in space, atmosphere testing, and Canadian contributions. Included is a table of contents. Metric measures are used.

Suggested Use:

SCI 8 - Earth & Space|SCI 8 - Teacher Reference|SCI 6- Exploring Space|

SCI 6 - Teacher Reference

Living and Working in Space (Print-Non-Fiction). Facts on File (CMG), 1989. 114 p. ISBN 0-8160-1849-9 (\$22.95 hdc.)

Living and working in space follows human accomplishments in space. This book takes you aboard early Soviet and American space stations. Shuttle flights and the USSR's Mir. We also learn how satellites work in space and how space programs are developing in many different countries around the world. A glimpse into the future is also taken as we explore plans for space station freedom and future missions to mars. This is an American resource.

Suggested Use:

SCI 8 - Earth & Space|SCI 6 - Exploring Space

The Living Soil: A Renewable Resource (Print-Non-Fiction). Lewry, Marilyn and Sue Bland. (Science Literacy Series). Weigl Educational (BB), 1991. 64 p. Order no. BB 883 (\$12.95) Order no. BB 884 (\$15.25 each teacher's guide or if class set of books (20) is bought, guide is free)

Investigations into what soil is and how it is formed, what happens in soil and what is the soil ecosystem are provided. The teacher's edition encorporates material for the following title in this series.

Suggested Use:

SCI 8 - Adaptation & Succession | SCI 7 - Saskatchewan-The Land

The Living Soil: Land Use and Society (Print-Non-Fiction). Bland, Sue. (Science Literacy Series). Weigl Educational (WEI), 1991. 64 p. Order no. BB 886 (\$14.95 pbk.) Order no. BB 884 (\$15.25 teacher's guide or if class sets of books (20) are bought guide is free)

Activities are provided in this module which address social issues connected to soil management and land use. The teacher's edition encorporates material for both titles in this series (see title above).

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 8 - Adaption & Succession|

SCI 7 - Saskatchewan-The Land

Lunar Greenhouse. Version 1.x (Software). MECC (SFWP), 1989. 34 p. Order no. 215 (\$59.00)

Contents: 5 1/4" disk, + 1 manual

System Requirements: Apple II series; 128 K; ProDOS; BASIC; 1 disk drive; monochrome monitor or colour monitor; Apple-compatible printer optional.

This is a discovery-learning simulation that allows students to test how each of four variables influences how well a vegetable plant grows and produces vegetables. Students use the information they have collected to predict the accuracy of the variable settings prior to conducting an experiment geared toward a specific goal.

Suggested Use:

SCI 8 - Plant Growth

Materials (Print-Non-Fiction). Jennings, Terry. (The Young Scientist Investigates). Oxford (OUP), 1984. 32 p. ISBN 0-19-918164-0 (\$9.95 pbk.) ISBN 0-19-918170-5 (\$11.95 hdc.)

Jennings deals with various types of natural and synthetic materials and how they are used. There are activities and a section which reviews the concepts that are introduced. The information is presented in a straight forward manner. This book would be beneficial to middle level students with lower reading skills. Included are a table of contents and a glossary.

Suggested Use:

SCI 7 - Structure & Design

Materials (Print-Non-Fiction). Taylor, Peter. (Starting Design & Technology). Cassell (PIP), 1990. ISBN 0-304-31648-2 (\$14.95 pbk.)

This book delivers a potpourri of interesting information about the composition, characteristics, and uses of various building materials. It can be used as a mini-encyclopedia of information about structural materials.

Suggested Use:

SCI 9 - Chemistry & You|SCI 8 - Consumer Product Testing|

SCI 7 - Structure & Design|SCI 7 - Force & Motion

Mechanisms (Print-Non-Fiction). Oza, Vijay and Martin Chandler. (Starting Design & Technology). Cassell (PIP), 1990. 63 p. ISBN 0-304-31649-0 (\$14.95 pbk.)

How is energy transformed from one form to another? How are simple machines used to transfer the point of application of force? How do they change the magnitude of the forces they apply? How are complex machines constructed from a series of simple machines? These questions are addressed and students are encouraged to investigate their answers in this book. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 7 - Force & Motion|SCI 7 - Renewable Resources in Saskatchewan

Methods of Motion: An Introduction to Mechanics. Book One. (Print-Non-Fiction). Gartrell, Jack E. National Science Teachers' Association (NSTA), 1989. 157 p. Order no. PB 39 (\$18.50 pbk. U.S.)

This manual is designed to help teachers introduce the sometimes daunting subject of Newtonian mechanics to students in the middle grades. The 17 teacher-created activities include marble races, a tractor-pull using toy cars, fettucini carpentry and film container cannons. The activities use readily available materials to give students visual, aural, and tactile evidence to combat their misconceptions. Suggested Use:

SCI 7 - Force & Motion

Micro Data Cards (Microslide). Science Kit & Boreal Laboratories (BORE), Order no. 63723-00 (\$17.95 Medium set of 11)

A labelled illustration of the specimen is provided above four mounted parts prepared for microscope viewing. This particular set features a dragonfly, dandelion, butterfly, rape, bee, lily, locust, pansy, iris, prawn and tulip.

Suggested Use:

SCI 9 - Diversity of Life|SCI 8 - Plant Growth

Other Uses:

Biology

Nature Projects for Young Scientists (Print-Non-Fiction). Rainis, Kenneth G. Franklin Watts (NEL), 1989. ISBN 0-531-10789-2 (\$17.50 hdc.)

This book includes a series of excellent projects for students in the area of life science. The material covers the DSLs, particularly promoting an interest in science. The material would be useful for enrichment and extension activities.

Suggested Use:

SCI 9 - Diversity of Life

Other Uses:

Biology

Nightwatch. Rev. ed. (Print-Non-Fiction). Dickins, Terence. Camden House (FIR), 1983. 159 p. ISBN 0-920656-91-9 (\$34.95 hdc.) ISBN 0-920656-89-7 (\$24.95 pbk.)

Suitable for avid amateur astronomers and first-time star gazers, this book contains charts, photos and information about stars, planets and moons. It also has a comprehensive section suggesting where more information about astronomy can be found.

Suggested Use: SCI 8 - Earth and Space

Nuts & Bolts: A Matter of Fact Guide to Science Fair Projects (Print-Non-Fiction). Van Deman, Barry A. and Ed McDonald. (Science Blueprint Series). The Science Man Press (CVB), 1980. 62 p. Order no. PUB 660 (\$8.95 pbk. U.S.)

This material shows the reader how to conduct a successful science fair project. The authors guide the reader step-by-step, from selecting a topic through the experimentation stage to the presentation and display stages. Poster style, eyecatching page layouts are used. Included are a table of contents, glossary, bibliography and an index.

Suggested Use:

SCI 9 - Science Challenge|SCI 8 - Science Challenge|

SCI 7 - Science Challenge

Oceans in Peril (Print-Non-Fiction). Fine, John Christopher. Atheneum (MMC), 1987. 141 p. ISBN 0-689-31328-4 (\$22.50 hdc.)

An examination of plant and animal resources found in the sea, the effects of human intrusion and pollution and possible solutions to the threat posed to our oceans is provided.

Suggested Use:

SCI 8 - Earth & Space|SCI 7 - Basics of Life

Of Dice & Men (Videotape). National Film Board (NFB), 1988. 12 min. Order no. 10188-056 (\$25.25)

This is an animated cartoon which discusses probability and its use in various areas of life.

Suggested Use:

SCI 9 - Risks & Limits

Our Changing Landscape (Print-Non-Fiction). Money, D.C. (Gareth Stevens Information Library). Gareth Stevens Children's Books (SBC), 1989. 64 p. ISBN 0-8368-0008-7 (\$17.95 hdc.)

The book outlines the effect of various industries and populations on the earth. It attempts to show the effect of change on the earth and the environment. Included are a glossary and an index.

Suggested Use: SCI 8 - Adaptation & Succession|SCI 7 - Saskatchewan-The Land

39

Toxic Waste (video & guide)	1-0188-047	\$ 49.95
Water (video & guide)	1-0188-048	\$ 49.95
Programs in Action (video & guide)	1-0189-034	\$ 26.95

Environment interrelationships of dams and diversion projects are explored in the video on water. The STSE Interrelationships relating to genetic engineering and chemistry and the by-products associated with toxic wastes are explored in the rest of the series.

Suggested Use:

SCI 9 - Risks & Limits|SCI 8 - Solutions

pH of Saskatchewan Solls (Map). SIP Publication M84. University of Saskatchewan. Saskatchewan Institute of Pedology (SSS), 1987. (Free of charge)

The Institute of Pedology, University of Saskatchewan has produced a four-colour map showing the pH levels of Saskatchewan soils. The leaflet also provides brief information on soil pH values.

Suggested Use:

SCI 9 - Saskatchewan Environment|SCI 7 - Saskatchewan - The Land

Other Uses:

Biology 20

Plants and Seeds (Print-Non-Fiction). Stidworthy, John. (Through the Microscope). Gloucester (NEL), 1990. 32 p. ISBN 0-531-17220-1 (\$16.50 hdc.)

Text and microscopic photographs introduce various forms of plant life, their methods of reproduction, and their assimilation of nutrients.

Suggested Use:

SCI 9 - Diversity of Life|SCI 8 - Plant Growth

Plate Tectonics - The Puzzle of the Continents (Videotape). (The Earth Science Video Library). McIntyre Media Ltd. (MCI), 1990. 15 min. Order no. 842000-21A3 (\$89.00 teacher's guide included)

This videotape explores the fundamentals of the Plate Tectonics Theory from Alfred Wegener's observations on continental drift to the latest computer analysis of movements at plate boundaries.

Suggested Use:

SCI 8 - The Moving Crust

Plate Tectonics (Through the Microscope) (Microslide). Boreal Laboratories (BORE), Plate Tectonics microslides Order no. 66110-11 (\$5.94) Microslide viewer Order no. 79701-10 (\$9.00)

These microslides show gabbro, dolorite, quartz, crystal, sedimentary rock, volcanic rock, seed fern, prehistoric acquatic animal and a fossilized animal.

Suggested Use:

SCI 8 - The Moving Crust

Playing Fair? The Rules of World Hunger (Print-Non-Fiction). World Vision Canada (WVC), 1990.

Includes 5 student handouts and a 12 p. teacher's guide (\$5.00 kit). For 25 copies of each of 5 lessons and a 12 p. teacher's guide, (\$30.00 kit). Additional lessons may be purchased for 50 cents each. No order no. is needed.

Although intended for use with secondary level students, with teacher guidance this resource could be useful with middle level students. Offers five classroom handouts: "The Facts About Hunger," "Land Use and Hunger," "Hunger and the Forests," "Hunger and International Trade," and "Hunger and the

Project Wild (1990) Activity Guide (Print-Non-Fiction). Canadian Wildlife Federation. 1990. 462 p. ISBN 1-55029-036-3

Project WILD activity guides are free to teachers attending a Project WILD workshop. Those attending the workshops in 1991 and subsequent years will receive the 1990 edition of the guide.

The guide cannot be purchased. Contact the workshop coordinator at 787-2314 or write to Project Wild Coordinator at the Wildlife Branch, Saskatchewan Natural Resources, 3211 Albert Street, Regina, Saskatchewan, S4P 3V7.

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 9 - Chemistry & You|

SCI 9 - Using Electricity|SCI 9 - Science Challenge|SCI 9 - Diversity of Life|

SCI 8 - Adaptation & Succession|SCI 7 - The Basics of Life| SCI 7 - Saskatchewan-The Land|SCI 7 - Structure & Design|

SCI 7 - Microorganisms

Projects With Flight (Print-Non-Fiction). Williams, John. (Simple Science Projects). Gareth Stevens Children's Books (SBC), 1992. 32 p. ISBN 0-8368-0768-5 (\$14.95 hdc.)

It is an easily read book that can be used by students and by teachers as a reference. Questions can be easily made for each activity. The many activities are great for the study of "Force and Motion" to show how air acts in nature and on man-made items. It is a useful book to hold student interest. The book has a list of other books as well as projects and catalogues on the topic of flight which students in grade 7 may enjoy.

Suggested Use:

SCI 7 - Force & Motion

Pyramids (Print-Non-Fiction). MaCaulay, David. Houghton Mifflin (NEL), 1975. ISBN 0-395-21407-6 (\$9.95 pbk.)

Text with black and white drawings show the construction of an Egyptian pyramid as a tomb for a Pharaoh. MaCauley explains the building of the structure step by step from base to capstone. The scientific and mathematical concepts employed in the construction are very interesting and educational. The work ends with the laying out of the Pharaoh after death. Dimensions A, B, E & G are supported by this material. A discussion of the use, construction and design problems of pyramids is given by the author.

Other recommended books by this author which deal with structure and design are:

Title	Order no.	Price
Unbuilding	ISBN 0-395-45425-5	\$11.95 pbk.
Cathedral: A Story of Its Construction	ISBN 0-395-31668-5	\$ 9.95 pbk.
City: A Story of Roman Planning and Construction	ISBN 0-395-34922-2	\$ 9.95 pbk.
Pyramid	ISBN 0-395-21407-6	\$23.95 hdc.
Underground	ISBN 0-395-24739-X	\$15.45 hdc. U.S.
Mill	ISBN 0-395-52019-3	\$11.95 pbk.
Castle	ISBN 0-395-32920-5	\$ 9.95 pbk.

Castle and Cathedral have both received the Caldecott Honour Book awards. Many of the titles have received mention in the School Library Journal Best Book of the Year Awards.

Suggested Use:

SCI 7 - Structure & Design

Other Uses:

Social Studies 9

Reading About Science. Book 1: Units, Living Things and Energy (Print-Non-Fiction). Coyle, Gerry, et al. Heinemann (IRW), 1982. 48 p. ISBN 0-435-57504-X (\$9.08 pbk.)

This is considered to be a good resource on general topics related to physical and biological science. The resource provides information which could be food for thought on various issues. Factors involved in both sides of some argument such as nuclear power are discussed, leaving the students to form their own opinions. Most of the information, however, is presented in a textbook format in which the student reads information and then answers questions based on the reading. There is no room for discovery learning in these situations. Included are a table of contents and an index.

Suggested Use:

SCI 7 - Basics of Life|SCI 7 - Force & Motion|SCI 6 - Ecosystems|

SCI 6 - Energy in Our Lives

Reading About Science. Book 3: Heat, Electricity, and Electromagnetism (Print-Non-Fiction). Coyle, Gerry, et al. Heinemann (IRW), 1982. 48 p. ISBN 0-435-57506-6 (\$9.08 pbk.)

Kellington gives a human and practical approach to everyday electrical and heating uses in the home. Historical to present day coverage is used. Being a British book, some of the terminology is different and interesting. This material covers all of the Dimensions of Scientific Literacy.

Suggested Use:

SCI 9 - Using Electricity|SCI 7 - Temperature & Heat

Reading About Science. Book 4: Gases, Acids, and the Earth (Print-Non-Fiction). Coyle, Gerry, et al. Heinemann Educational Books (IRW), 1982. 48 p. ISBN 0-435-57507-4 (\$9.08 pbk.)

Each two-page reading comes with questions that suggest further investigation and research. Included are table of contents and an index.

Suggested Use:

SCI 9 - The Atmosphere|SCI 9 - Chemistry & You|SCI 8 - Solutions

Recycling (Wall Chart). Pictorial Charts (CEM), 1988. 76 cm x 100 cm Order no. T57 (\$12.95)

This colourful resource provides ideas for recycling. Activities are suggested in the accompanying guide. References listed in the guide are British, but could be used to stimulate student interest in similar Canadian organizations.

Suggested Use:

SCI 7 - Resource Use

Rediscovery (Print-Non-Fiction). Henley, Thom. Western Canada Wilderness Committee (WCWC), 1989. 288 p. ISBN 0-9692230-3-X (\$14.95 pbk.)

This is an excellent, comprehensive handbook for teachers who wish to bolster the self-esteem of Aboriginal and non-Aboriginal students while simultaneously promoting a respect for the environment. This material is presented within the context of Aboriginal traditions. This book contains many colour photographs and an activity guide.

Suggested Use:

SCI 9 - Science Challenge|SCI 8 - Science Challenge|

SCI 7 - Science Challenge SCI 6 - Science Challenge

Other Uses:

Biology 20/30, Science 10, Elementary Science

Agriculture	Videotape & Manual	BB 762	\$29.15	SCI 9 - Saskatchewan- Environment
	Manual Videotape	BB 775 Dup. order no. 5011	\$17.15	
Forestry	Manual	BB 6446	ТВА	SCI 7 - Renewable Resources in Saskatchewan
Energy & the Environment	Videotape kit	BB 6633	\$29.15	SCI 9 - Sask The Environment
	Manual	BB 6445	\$11.55	
Suggested Us		itchewan-Environmen y Resources in Saska	•	- The Moving Crust

SCI 7 - Renewable Resources in Saskatchewan

Save Our Planet: 750 Everyday Ways You Can Help Clean Up The Earth (Print-Non-Fiction). Dell (DOU), 1990. 210 p. ISBN 0-440-5026-7-5 (\$12.95 pbk.)

This paperback first discusses the major environmental problems the earth has and then suggests personal, practical solutions to all of them. It is very interesting reading and is filled with ideas for projects.

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 7 - Resource Use|SCI 6 - Ecosystems

Science Alive! A Science Fair Idea File for Teachers In the N.W.T (Print-Non-Fiction). Bromley, Marianne, et al. Science Institute of the Northwest Territories (SWT), 1988. 162 p. (\$15.00 binder) Featured topics come with background information, a detailed sample project, related ideas and a resource list. Topics include: aurora, snow, pingo, glaciology, dinosaurs, pollution, energy, land use, ecology, weather, computers, wildlife management, ethnobotany, drums, tanning, language and smoking. This resource recognizes contributions of Dene and Inuit peoples and is relevant for Northern communities. Includes table of contents. Metric measures.

Suggested Use:

SCI 9 - Science Challenge|SCI 8 - Science Challenge|

SCI 7 - Science Challenge SCI 6 - Science Challenge

Other Uses:

Elementary Science, Social Studies, English Language Arts, Arts Education,

Health, Mathematics

The Science Book of Air (Print-Non-Fiction). Ardley, Neil. (The Science Book of ...). Doubleday Canada (DOU), 1991. 29 p. ISBN 0-385-25296-X (\$9.95 hdc.)

Ardley deals with air as a force, how it occupies space, how air can be used to work and its use in air foils of airplanes. The pictures are very descriptive and the instructions are easy to follow. Key Science Concepts are supported by having students do experiments on the properties of air. Scientific and Technical Skills could be supported by using the material for science fair or class projects. Science-Related Interests and Attitudes could be developed through ideas which prompt the students to ask why in the experiments presented. Neil deals with air as a force, how it occupies space, how air can be used to work, its use in air foils of airplanes. The pictures are very descriptive and the instructions are easy to follow.

Suggested Use:

SCI7 - Force & Motion

Other Uses:

Elementary Science

Science 10 topics. Program one would be useful in the Science Challenge unit. This program examines attempts being made to convince girls of high school age that they should not opt out of the study of science. High school girls dropping out of science courses are ruling themselves out of a variety of exciting careers.

Suggested Use:

SCI 9 - General Reference|SCI 8 - General Reference|

SCI 7 - General Reference

Science Equals Success (Print-Non-Fiction). Office of Research and Improvement, U.S. Dept. of Education (WEEA), 1988. 115 p. (\$16.00 pbk. U.S.)

This inquiry method book for middle level science classes promotes career awareness, co-operative learning and problem solving by concept development. Pictures with American content are used. Included are a table of contents and an index.

Suggested Use:

SCI 9 - Chemistry & You|SCI 9 - Diversity of Life|

SCI 8 - Solutions SCI 8 - Energy Resources in Saskatchewan

SCI 8 - The Moving Crust|SCI 7 - Forces & Motion|SCI 7 - Structures & Design|

SCI 7 - Basics of Life|SCI 7 - Saskatchewan-The Land

Other Uses:

Elementary Science

Science Essentials: Geology (Videotape). (MHP). Approx. 8 min. each - 4 programs Dup. order no. V3420-V3423

Titles in the series include:

How Does Wind Shape the Earth's Surface? Dup. order no. V3420 How Does Water Shape the Earth's Surface? Dup. order no. V3421 How Do Living Things Shape the Earth's Surface? Dup. order no. V3422 What are the Different Shapes on the Earth's Surface? Dup. order no. V3423

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 8 - Adaptation & Succession|

SCI 7 - Saskatchewan-The Land

Science Essentials: Matter (Videotape/Videodisc). Britannica, 32 min. (EBP) Order no. D0310-077 (\$340.00 videodisc) Order no. 4550 (\$315.00 videotape)

Through a short, 4-part series, the video Science Essentials: Matter helps the viewer to better understand, through observation and experimentation if desired: "How Matter Changes States," "What A Gas Is," "What A Liquid Is," "What A Solid Is."

Suggested Use:

SCI 9 - Chemistry & You|SCI 6 - Chemicals & Reactions

Other titles in this series which are also recommended and available in videotape and videodisc are:

Curriculum Correlation Order no. Price - Videodisc order no. D0311-077 \$340.00 SCI 6 - Ecosystems Ecosystems \$315.00 SCI 9 - Saskatchewan-Environment - Videotape order no. 4555 - Videodisc order no. D0306-077 \$340.00 SCI 6 - Ecosystems **Animals** \$315.00 SCI 8 - Adaptation & Succession - Videotape order no. 4530

SCI 9 - Diversity of Life

Science Experiences: Cooperative Learning and the Teaching of Science (Print-Non-Fiction). Hassard, Jack. Addison-Wesley (ADD), 1990. 315 p. ISBN 0-201-23134-4 (\$39.65 pbk.)

This is an excellent book dealing with issues such as self actualization, the future, geology, evolution

science, careers technology and earth science are compiled. Students are encouraged to use newspapers for articles which may lead to continued use of newspapers throughout their lives. All of the Dimensions of Scientific Literacy except Scientific and Technical Skills are supported. Included are a table of contents.

Suggested Use:

SCI 9 - Saskatchewan Environment|SCI 8 - Adaptation & Succession|

SCI 8 - The Moving Crust|SCI 6 - Ecosystems

Other Uses:

Science 10|Wellness

Science Is...: A Source Book of Fascinating Facts, Projects and Activities. 2nd ed. (Print-Non-Fiction). Bosak, Susan V. Scholastic (SCH), 1991. 515 p. ISBN 0-590-74070-9 (\$29.95 softcover Otabind binding)

This new edition is completely updated and expanded by 100 pages of additional activities, for a total of over 450 experiments, projects, plays, stories, puzzles, and games. Developed over eight years with educators, parents, and children across Canada, the book covers all areas of science. The tested activities use simple materials. Activity pages, which can be used directly by students, contain background information, cartoon illustrations, materials required, and how to do the activity. Activities range from the popular "Quickies" to longer term projects. Two new sections are "Using This Book," which provides practical teaching tips, and "Other Resources," an annotated listing of books and organizations.

Suggested Use:

All units

Other Uses:

Elementary Science

Science Matters: Achieving Scientific Literacy (Print-Non-Fiction). Hazen, Robert M. and James Trefit. Doubleday (BB), 1991. 294 p. Order no. BB 887 (\$15.00 pbk.)

This could be used for teacher background information in all grades, and for student reference at the Middle Level and Secondary Level. In an attempt to 'demystify' some of the concepts of science, the authors have given brief explanations for a potpourri of scientific terms. The authors hope that the information provided will help readers to understand the scientific issues of the day. This material would be useful in developing technological literacy. Included are a table of contents and an index.

Suggested Use:

SCI 9 - Science Challenge|SCI 8 - Science Challenge|

SCI 7 - Science Challenge | SCI 6 - Science Challenge

Other Uses:

Secondary Science

Science Olympics: Organization and Events Manual (Print-Non-Fiction). Youth Science Foundation (YSF), 1990. unpaged (\$15.00 pbk.)

The Youth Science Foundation provides lots of great ideas for Science Olympics events. This excellent resource briefly introduces the rationale for science olympics and carefully explains how to organize such an event. The material gives many sample events for grades 4 through 12. Puzzles and quizzes are also provided. Depending on the events chosen, almost any of the DSLs and respective factors could apply.

Suggested Use:

SCI 9 - Science Challenge|SCI 8 - Science Challenge|

SCI 7 - Science Challenge | SCI 6 - Science Challenge

Other Uses:

Secondary and Elementary Science

SciencePlus: Technology and Society 7 (Print-Non-Fiction). Harcourt Brace Jovanovich, Canada (BB), 1989. 439 p. Order no. BB 6575 (\$33.40 hdc.) Order no. BB 6576 (\$46.60 loose-leaf pkg. & binder, teacher's resource)

The interrelationships among science, technology, society and the environment are the focus of this innovative series of texts. Concepts of science are introduced, explored

Suggested Use:

SCI 7 - The Basics of Life SCI 7 - Saskatchewan-The Land

SCI 7 - Force & Motion|SCI 7 - Microorganisms|

SCI 7 - Temperature & Heat|SCI 7 - Structure & Design

SciencePlus: Technology and Society 8 (Print-Non-Fiction). Harcourt Brace Jovanovich, Canada (BB), 1990. 436 p. Order no. BB 6577 (\$30.90 hdc.) Order no. BB 6578 (\$43.15 loose-leaf pkg. & binder, teacher's resource)

See above annotation

Suggested Use:

SCI 8 - Adaptation & Succession|SCI 8 - The Moving Crust|

SCI 8 - Solutions|SCI 8 - Energy Resources in Saskatchewan|

SCI 8 - Consumer Product Testing|SCI 8 - Plant Growth

SciencePlus: Technology and Society 9 (Print-Non-Fiction. Harcourt Brace Jovanovich, Canada (BB), 1990. 422 p. Order no. BB 6579 (\$30.90 hdc.) Order no. BB 6580 (\$43.15 loose-leaf pkg. & binder, teacher's resource)

See annotation for Science Plus: Technology and Society 7

Suggested Use:

SCI 9 - Saskatchewan Environment|SCI 9 - Chemistry & You|

SCI 9 - Using Electricity|SCI 9 - Diversity of Life|SCI 9 - Fluids & Pressure

Sea Pollution (Wall Chart). Pictorial Charts Educational Trust (CEM), n.d. Includes one 74 cm by 98 cm. wall chart and 4 p. notes. Order no. T61 (\$12.95 wall chart)

This colourful, attractive chart illustrates and explains how the natural cycles of the sea are interrupted by pollutants such as sewage sludge, industrial waste, radioactive materials, oil spills and litter. Permission has been given by the company for teachers to copy the accompanying notes for use in the classroom.

Suggested Use:

SCI 6 - Ecosystems

Other Uses:

Social Studies 6

The Secret Life of Cosmetics (Print-Non-Fiction). Cobb, Vicki. J. B. Lippincott (HCP), 1985. 111 p. ISBN 0-397-32122-8 (\$18.89 hdc.)

Cobb presents a set of experiments on cosmetics such as soaps, toothpaste, lotions, creams and make-up. This is not very interesting in the method of presentation, but is a good reference source. Included are table of contents and an index.

Suggested Use:

SCI 9 - Chemistry & You|SCI 8 - Consumer Product Testing

Solar Energy: Hope for the Future (Videotape). Increase Video (ITF), 26 min. Order no. S0L013 (\$64.95)

Why don't we make better use of the energy from the sun? The video looks at the pluses and minuses of solar energy.

Suggested Use:

SCI 7 - Renewable Resources in Saskatchewan

Sound Science (Print-Non-Fiction). Kaner, Etta. Kids Can Press (UTP), 1991. 96 p. ISBN 1-55074-054-7 (\$7.96 pbk.)

A fun introduction to basic physics, students discover what sound is and how it works in this easy-to-follow book of experiments. Following each experiment, a "How Does it Work?" section explains the science behind the results in simple, concise terms. This resource would encourage students to experiment with sound and sound production. It would also promote a critical look at the sounds around them, and the creation of ways to produce new sounds. The material strongly supports the Nature of Science, Processes of Science and the Scientific and Technical Skills Dimensions of Science. Kaner does a good job of showing the relationship between science and technology. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 6 - Energy in Our Lives

Other Uses:

Physics 20|Elementary Science

Space Science Projects for Young Scientists (Print-Non-Fiction). McKay, David W. and Bruce G. Smith. (Projects for Young Scientist). Franklin Watts (NEL), 1986. 127 p. ISBN 0-531-10244-0 (\$17.50 hdc.)

Ideas and instructions are given for a variety of science projects that examine the characteristics of the space environment and consider forces such as gravity, magnetism, and buoyancy. Included are a table of contents, bibliography and an index.

Suggested Use:

SCI 8 - Earth & Space

Spiderwebs to Skyscrapers: The Science of Structures (Print-Non-Fiction). Darling, David. Dillon/Maxwell Macmillan (BB), 1991. 57 p. Order no. BB 6609 (\$19.50 hdc.)

Highly recommended, this resource provides hands-on experiments introducing natural and human produced structures such as a bird's nest and gravity dams. Information is also given on structural elements such as arches, cantilevers, piles and trusses. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 7 - Structure & Design

Structures (Print-Non-Fiction). Jennings, Terry. (The Young Scientist Investigates). Oxford University Press (OUP), 1984. 32 p. ISBN 0-19-918162-4 (\$9.95 pbk.) ISBN 0-19-918168-3 (\$11.95 hdc.)

Short bits of interesting information on structures are given in this British resource. Structure and function are tied together well in this resource which makes it easy for the students to use and understand, however, there is no particular flow to the contents. This resource is especially good for students with learning disabilities. Included are a table of contents and glossary.

Suggested Use:

SCI 7 - Structure & Design

questioning and listening skills are the focus of some chapters. Included are a table of contents, glossary, bibliography and index.

Suggested Use:

SCI 8 - Teacher Reference|SCI 7 - Teacher Reference|

SCI 6 - Teacher Reference

Other Uses:

Elementary Science

Teaching Science Today (Print-Non-Fiction). Wright, Jill D. J. Weston Walch (CVB), 1982. 232 p. Order no. 922 (\$13.95 pbk. U.S.)

A number of activities are presented to help the educator make science teaching more interesting and fun. Introduction activities, puzzle activities and science projects are presented in a useable manner. The Nature of Science, Key Science Concepts and the Processes of Science are supported by this material. Included is a table of contents.

Suggested Use:

SCI 9 - Teacher Reference|SCI 8 - Teacher Reference|

SCI 7 - Teacher Reference|SCI 6 - Teacher Reference

Other Uses:

Science 10

Teaching The Native American. 2nd ed. (Print-Non-Fiction). Gilliland, Hap. Kendall/Hunt (KHP), 1992. 196 p. ISBN 0-8403-7820-3 (\$18.95 pbk. U.S.)

Gilliland discusses the importance of culture in educating all students. The resource includes information on self-image, cooperation, sharing, learning styles and discipline. Various subjects from arts to computers are mentioned.

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 9 - Teacher Reference|

SCI 9 - Science Challenge

Other Uses:

All Subject Areas

This Planet is Mine (Print-Non-Fiction). Metzger, Mary and Cinthya P. Wittaker. (A Fireside Book). Simon & Schuster (IRW), 1991. 224 p. ISBN 0-671-73733-3 (\$10.95 pbk.)

A teacher reference, this information could be used for student awareness or school projects. Included are a table of contents and a glossary.

Suggested Use:

SCI 9 - Saskatchewan-Environment|SCI 9 - Teacher Reference|

SCI 9 - Science Challenge

The Thomas Edison Book of Easy and Incredible Experiments (Print-Non-Fiction). John Wiley & Sons (WIL), 1988. 146 p. ISBN 0-471-62089-0 (\$34.95 hdc.) ISBN 0-471-52090-4 (\$18.50 pbk.)

This is considered to be an excellent resource for teachers or for students looking for science fair projects as it explains and demonstrates how certain electrical devices work. The drawings are simple with no colour, but are clear and easy to follow. In contrast with other books providing details for science experiments, these details seem more elaborate and more illustrative of models than experiments. Included are a table of contents, bibliography and an index.

Suggested Use:

SCI 9 - Using Electricity SCI 6 - Energy in Our Lives

Tops Learning Systems (Print-Non-Fiction). Concepts in Learning (CLL),

Modules	Module	Price	Curriculum Correlation
	no.		
Animal Survival	37	\$21.95	SCI 7 - Life-Keys to Survival
Pendulums	01	\$10.00	SCI 7 - Force & Motion
Balancing	04	\$10.00	SCI 7 - Force & Motion
Weighing	05	\$12.00	SCI 7 - Force & Motion
Motion	21	\$22.50	SCI 7 - Force & Motion
Machines	22	\$10.00	SCI 7 - Structure & Design,
			SCI 8 - Energy & Machines
Kinetic Model	14	\$12.00	SCI 7 - Temperature & Heat
Heat	15	\$10.00	SCI 7 - Temperature & Heat
Solutions	12	\$17.65	SCI 8 - Solutions
Analysis	10	\$12.65	SCI 9 - Chemistry & You
Oxidation	11	\$12.00	SCI 9 - Chemistry & You
Electricity	19	\$17.65	SCI 9 - Using Electricity
Magnetism	20	\$15.00	SCI 9 - Using Electricity
Probability	08	\$15.00	SCI 9 - Risks & Limits
Floating and Sinking	09	\$15.00	SCI 9 - Fluids & Pressure
Pressure	16	\$12.65	SCI 9 - Fluids & Pressure

Each module contains a series of activities through which students may acquire a deeper understanding of the concept and the significance of the concept to their lives.

Suggested Use:

SCI 9 - Chemistry & You|SCI 9 - Using Electricity|SCI 9 - Risks & Limits|

SCI 9 - Fluids & Pressure|SCI 8 - Solutions|SCI 7 - Basics of Life|

SCI 7 - Force & Motion|SCI 7 - Structure & Design|SCI 7 - Temperature & Heat

The True Story of the Three Little Pigs (Print-Fiction). Scieszka, Jon. Viking (BB), 1989. unp. Order no. BB 6495 (\$16.30 hdc.)

Written by A. Wolf, who feels it is time that readers learned his point of view, this is a comic parody of the traditional folktale. According to Mr. Wolf, the purpose of his visits to the pigs' homes was merely to borrow a cup of sugar. The straw and the stick homes fell apart because of sneezes caused by his bad cold. He claims that news reporters covering the events have framed him in order to present a more exciting story. This modern retelling offers opportunities for class discussion about point of view, the influence of the media and stereotypes. Offers appealing colour illustrations. The material would be useful in the elementary science units on the food chains.

Suggested Use:

SCI 7 - General Reference | SCI 6 - General Reference

Other Uses:

English Language Arts, Elementary Science

Two Views: Global warming (Kit). Nystrom. (NYS), 1992. Order no. 6TV100 (\$95.00 U.S.)

Contents: 1 videocassette, 15 mins., 16 topic/project cards, 5 activity sheets, 50 survey forms, 1 poster (23 1/2 x 35 1/2 in.), teacher's guide.

This material provides information and projects on this topical, environmental issue, with the video showing two students discussing global warming. The package tries to make students aware of the

Understanding Science 1: A Teachers' Resource Book (Print-Non-Fiction). Boyd, Joe and Walter Whielaw. John Murray (IRW), 1989. 168 p. ISBN 0-7195-4622-2 (\$39.38 pbk.)

Contents include recoding simple experiments, observing living things, problem solving with water as well as electricity, thinking about energy and measuring accurately with reinforcement material, extension material and readings. The material-develops understanding from simple to complex. It is considered to be excellent reference material. Included is a table of contents.

Suggested Use:

SCI 9 - Using Electricity|SCI 8 - Plant Growth|SCI 7 - Basics of Life|

SCI 6 - Energy in Our Lives|SCI 6 - Ecosystems

Vibrations and Radiations (Print-Non-Fiction). Raitt, Gordon. (Physics in Action). Cambridge University (IRW), 1987. 89 p. ISBN 0-521-31088-1 (\$12.65 pbk.)

Raitt's material is excellent for promoting critical and creative thinking and for supporting the Dimension of STSE Interrelationships. This is good for advanced students in grades 6 and 7 who are capable of understanding the application of knowledge about vibrations in architecture.

Suggested Use:

SCI 7 - Structure & Design|SCI 6 - Energy in Our Lives|

SCI 6 - Teacher Reference

Water Energy (Print-Non-Fiction). Rickard, Graham. Wayland (NEL), 1990. 32 p. ISBN 1-85210-905-X (\$17.99 hdc.)

Why alternative energy is required, how power is produced from water, tidal power, power from waves, heat from the sea and a science project related to hydro power generation are discussed. There is support for Science-Related Interests and Attitudes and very good support for STSE Interrelationships. Included are a table of contents, glossary, bibliography and an index.

Suggested Use:

SCI 7 - Renewable Resources in Saskatchewan

The Weather Sky (Print-Non-Fiction). McMillan, Bruce. Farrar Straus Giroux (HCP), 1991. 40 p. ISBN 0-374-38261-1 (\$22.95 hdc.)

The author presents a study of weather patterns and clouds that occur in the earth's temperate zones. Beautiful photography of clouds with graphs showing altitude plus illustrations depicting positioning of clouds in respect to fronts are included. This is considered to be a good resource for the unit on atmosphere especially in the depicting of cloud types. The other information presented is somewhat limited. Included are a glossary and an index.

Suggested Use:

SCI 9 - The Atmosphere

What In the World Is Plate Tectonics? (Software). (Search & Solve Series). Entrex (SCH), 1989.

Contents: Master disk, student disk(s), teaching guide, user's handbook, activity masters in a loose-leaf binder. (Student Disks Reproducible).

System Requirements: Apple-64K; MS-DOS (Tandy 1000, IBM and compatibles) - 256K with colour graphics card. Compatible with Apple IIGS. Compatible with all standard MS-DOS Networks.

Why Do Dogs Have Wet Noses? and Other Imponderables (Print-Non-Fiction). Feldman, David. Harper Perennial (HCP), 1990. 249 p. ISBN 0-06-016293-7 (\$24.50 hdc.)

While one should not necessarily consider this book an information resource, it is an excellent book full of ideas for class introductory and motivating statements and questions. This would be an interesting book to have in a reading corner, for use by students and teachers who have a moment or two of extra time. Included are a table of contents and an index.

Suggested Use:

SCI 9 - General Reference|SCI 8 - General Reference|

SCI 7 - General Reference | SCI 6 - General Reference

Why Do Our Bodies Stop Growing? (Print-Non-Fiction). Whitfield, Philip and Ruth Whitfield. Viking Kestrel (PBC), 1988. 95 p. ISBN 0-670-82331-7 (\$22.95 hdc.)

This would be a good book for students who want to browse or who want some introductory information on a particular topic. Questions about the human anatomy are answered by the Natural History Museum of London. Included are table of contents and an index.

Suggested Use:

SCI 7 - Basics of Life|SCI 6 - Human Body Control System|

SCI 6 - Growth & Development

Why Do Volcanoes Erupt? (Print-Non-Fiction). Viking Penquin (PBC), 1990. ISBN 0-670-83385-1 (\$19.95 hdc.)

Considered an excellent resource, this book is a series of 139 questions dealing with the formation of mountains, rivers, caves, etc. The information is concise and is packed with good diagrams and pictures. Included are a table of contents, glossary and an index.

Suggested Use:

SCI 9 - The Atmosphere|SCI 8 - The Moving Crust|SCI 8 - Earth & Space|

SCI 7 - Saskatchewan - The Land|SCI 6 - Exploring Space

Wildflowers Across the Prairies (Print-Non-Fiction). Fenton, Vance, James Jowsey, and James McLean. Western Producer Prairie Books (BB), 1984. 214 p. Order no. BB 2558 (\$16.05 pbk.)

This is an excellent book for identifying species of flowering plants which are native to Saskatchewan and for encouraging students to become interested in the diversity of Saskatchewan angiosperms. One or more colour illustrations and line drawings are given for some of 270 species of plants of Saskatchewan and similar areas including Manitoba, Alberta, Northwest Territories, Montana and Dakotas and Minnesota. Scientific and popular names identify each plant. Information on the flowers, fruit, leaves, growth habit and habitat is provided. This book was previously listed in the *Textbooks Circular*. Included are a table of contents, glossary, bibliography and an index.

Suggested Use:

SCI 9 - Diversity of Life SCI 8 - Adaptation & Succession SCI 6 - Ecosystems

Other Uses:

Biology 20

Wind Energy (Print-Non-Fiction). Rickard, Graham. (Alternative Energy). Wayland (NEL), 1990. 32 p. ISBN 1-85210-943-2 (\$17.99 hdc.)

In this overview of wind power, Rickard has included a project using readily available material to demonstrate a wind turbine. Many colour illustrations are used. The historic factor of the Nature of Science, the conservation and cycle factors of Key Science Concepts as well as the science and

Indexes

The titles listed in this bibliography have been indexed according to the following topics listed in *Science: A Curriculum Guide for the Middle Level* (p. 10). For the purposes of this bibliography, the additional headings of "General Reference" and "Teacher Reference" have also been included. Titles under these headings may be useful in support of the curriculum and are found at the end of this topical index. Please refer to the curriculum document for time allotments for each topic.

Grade 6 Topical Index

Core units:

- · Chemicals and Reactions
- Earthquakes and Volcanoes
- Ecosystems
- Exploring Space
- Energy in Our Lives
- Science Challenge (integrated into all units)

Optional Units:

- Growth and Development
- Human Body Control Systems
- Earth's Climate

Chemicals & Reactions

Chemically Active! Experiments
How To Write Science Fiction & Fantasy
The Informazing Resource Book
Innovations in Science. Levels 4 - 6
Science Essentials: Matter
Science Is...: A Source Book...

Earth's Climate

The Climate Puzzle: Climate - Past, Present and Future How To Write Science Fiction & Fantasy The Informazing Resource Book Patterns of Climate Science Is...: A Source Book...

Earthquakes & Volcanoes

Earthquakes - kit
Earthquakes - van Rose
Exploring Soil and Rocks
Global Atlas
How To Write Science Fiction & Fantasy
The Informazing Resource Book
Innovations in Science. Levels 4 - 6

Keepers of the Earth: Native American Stories...
National Geographic Picture Atlas of Our World
Predicting Volcanic Eruptions
Science Is...: A Source Book of....
Understanding Our Earth

Human Body Control Systems

Foodworks: An Ontario Science Centre Book How to Write Science Fiction & Fantasy The Informazing Resource Book I.S.I.S. (Individualized Science.... Janice VanCleave's Biology for Every ... Science Is...: A Source Book of... Why Do Our Bodies Stop Growing?

Science Challenge

The Complete Science Fair Handbook
How to Make a Chemical Volcano and Other...
How to Write Science Fiction & Fantasy
The Informazing Resource Book
Rediscovery
Rediscovery: The Eagle's Gift

Rediscovery: The Eagle's Gift Science Alive! A Science Fair Idea...

Science Fair

Science Fairs: Organization, ... Sciencefare: A Practical Guide ...

Science Is...: A Source Book of Fascinating... Science Matters: Achieving Scientific... Science Olympics: Organization and ...

General Reference

Atlas of the Environment
Discovery & Inventions
Discovery! Experiences with...
Do Animals Dream?
Graphical Analysis
How to Write Science Fiction & Fantasy
The Informazing Resource Book
Inventions: An Amazing Investigation
The Kids' Environment Book

Magic Tricks, Science Facts
Myths of the Iroquois
Science Is...: A Source Book of Fascinating...
The True Story of the Three Little Pigs
When Do Fish Sleep
Why Do Dogs Have Wet Noses? and Other...
Why Do Clocks Run Clockwise? and Other...
The World Map

Teacher Reference

Animals in the Classroom, Selection, ...
Cockroaches and Things: A Manual for...
How to Encourage Girls in Math & Science
How to Write Science Fiction & Fantasy
The Informazing Resource Book
Living and Learning in the Space Age
Magnetic Moments: Science Teaching...
Making the Grade: Evaluating...

Science Club: Organization and ...
Science Fairs: Organization, Regulations...
Science Is...: A Source Book of Fascinating...
Selling Science to Students: A Guide...
Teaching Modern Science. 5th ed.
Teaching Science Today
Together We Learn
Together We Learn: A Handbook ...
Vibrations and Radiations

The titles listed in this bibliography have been indexed according to the following topics listed in *Science: A Curriculum Guide for the Middle Level* (p. 10). For the purposes of this bibliography, the additional headings of "General Reference" and "Teacher Reference" have also been included. Titles under these headings may be useful in support of the curriculum and are found at the end of this topical index. Please refer to the curriculum document for time allotments for each topic.

Grade 7 Topical Overview

Core units:

- The Basics of Life
- Saskatchewan The Land
- Force and Motion
- Structures and Designs
- Renewable Resources in Saskatchewan
- Science Challenge (integrated into all units)

Optional Units:

- Microorganisms
- Temperature and Heat
- Resource Use

Basics of Life

Animal Life Databases **Animal Pathfinders** The Canadian Junior Green Guide Can The Whales Be Saved? C'mon Geese City Safaris Discover: A Science Experiment Earthcycles and Ecosystems **Ecosystems With Island Survivors Education Goes Outdoors** Enviro-Canada Series 1 How to Write Science Fiction & Fantasy The Informazing Resource Book I.S.I.S. (Individualized Science.... Janice VanCleave's Biology for Every Kid Keepers of the Animals Keepers of the Earth: Native American...

Knee High Nature Series The Learning Cycle: Life Science Life Science Activities for Grades 2-8. Man and the Environment Oceans in Peril People & Caribou in the Northwest Territories Playing Fair? The Rules of World Hunger Project Wild (1990) Activity Guide Reading About Science. Book 1 Science Directions 7 Science Equals Success Science Experiences: Cooperative Learning... Science Is...: A Source Book of Fascinating... SciencePlus: Technology and Society 7 **Tops Learning Systems Understanding Science 1** Why Do Our Bodies Stop Growing?

Energy and Machines

See Force and Motion and Science Challenge series

Resource Use

How to Write Science Fiction & Fantasy The Informazing Resource Book Recycling

Save Our Planet: 750 Everyday... Science Is...: A Source Book... Two Views: Waste Management

Saskatchewan-The Land

Consumer Chemistry
Environmental Science
Exploring Soil and Rocks
A Fine Science 1986 Series
A Fine Science 1985 Series
Geology of Saskatchewan
Global Atlas
Grasslands - Jennings
Grasslands - Lambert
How to Write Science Fiction & Fantasy
The Informazing Resource Book
Janice VanCleave's Earth Science for...
Keepers of the Earth: Native...
Landscapes Series

Landscapes: A Guide to the...
The Living Soil: A Renewable Resource
The Living Soil: Land Use and Society
Our Changing Landscape
pH of Saskatchewan Soils
Project Wild (1990) Activity Guide
Rocks & Soil
Science Directions 7
Science Essentials: Geology
Science Equals Success
Science Is...: A Source Book of...
SciencePlus: Technology and Society 7
Soil Science and Management. 2nd ed.
Understanding Our Earth
Why Do Volcanoes Erupt?

Science Challenge

The Complete Science Fair Handbook
Environmental Science: 49 Science Fair...
50 Simple Things Kids Can Do To Save...
Flight
How Sport Works
How to Make a Chemical Volcano...
How to Write Science Fiction & Fantasy
The Informazing Resource Book
Nuts & Bolts: A Matter of Fact...

Rediscovery: The Eagle's Gift

Science Alive! A Science Fair... Science Is...: A Source Book of... Science Matters: Achieving... Science Olympics: Organization...

Science Fair

Science Fairs: Organization... Sciencefare: A Practical Guide...

Structures & Design

The Acme School of Stuff
Animal Architects
Bird Flight
California Indian Watercraft
C'mon Geese
Discover Aerodynamics with Paper Airplanes
Engineering Projects for Young Scientists

Exploring Forces and Structures
Exploring Science Through Art
A Fine Science 1985 Series
Fishwheels and How to Build Them
Flight

Forces: Building A Cantilever Bridge

Houses of Bark: Tipi, Wigwam and Longhouse

Grade 7 Media Index

Atlas

Global Atlas

Audiocassette

When Do Fish Sleep

Kit

Give Earth a Chance
Heat and Temperature Set
Saskatchewan Resource Series
Two Views: Waste Management
Understanding Our Earth

Map

pH of Saskatchewan Soils The World Map

Print-Fiction

The True Story of the Three Little Pigs

Simulation Kit

Flight

Software

Animal Life Databases
Discover: A Science Experiment
Discovery! Experiences with Scientific

Ecosystems With Island Survivors Graphical Analysis Paper Plane Pilot. Version i.x Science Toolkit

Videodisc

Animal Pathfinders

Videotape

The Acme School of Stuff
C'mon Geese
A Fine Science 1985 Series
A Fine Science 1986 Series
It Starts At Home Series
Landscapes Series
Magnetic Moments: Science Teaching...
Rediscovery: The Eagle's Gift
Science Edition 3 Series
Science Essentials: Geology
Solar Energy: Hope for the Future
Together We Learn

Wall Chart

Enviro-Canada Series 1 Recycling Structures and Materials

Earth & Space

The Acme School of Stuff

America in Space: The First 25 Years **Aviation and Space Science Projects** Best of the Space Shuttle: 1977-1984

Blue Planet: A Portrait of Earth

Canada in Space

Discover: A Science Experiment **Exploring Forces and Structures** A Fine Science 1985 Series A Fine Science 1986 Series

Flight

Flight! Free As A Bird

Janice VanCleave Astronomy for Every Kid: Janice VanCleave's Earth Science for Every...

How to Write Science Fiction & Fantasy

The Informazing Resource Book Living and Learning in the Space Age

Living and Working in Space

Night Watch. Rev. ed.

Oceans in Peril Our Future in Space

Science Is ...: A Source Book ...

Space Science Projects for Young Scientists

Today's World in Space Series. Set II.

Why Do Volcanoes Erupt?

Energy Resources in Saskatchewan

The Acme School of Stuff

Bioenergy

Coal: Fueling the Future

Earth Day Every Day: Waste Management

Earthcycles and Ecosystems

Energy and Society

Energy Projects for Young Scientists

The Energy Resource Game

Energy Sources (Museum to Go!)

Energy Transfer

A Fine Science 1985 Series

A Fine Science 1986 Series

Geology of Saskatchewan

Geothermal Energy Give Earth a Chance

Global Atlas

How to Write Science Fiction & Fantasy

The Informazing Resource Book I.S.I.S. (Individualized Science...

It Starts At Home Series

Landscapes: A Guide to the... The Learning Cycle: Physical...

Natural Gas: The Movie

Pollution and Conservation Saskatchewan Electrical Energy...

Saskatchewan Resource Series

Science Equals Success

Science Is...: A Source Book...

SciencePlus: Technology and Society 8

SEEDS (Society, Environment & ...

Wind Energy

The Moving Crust

Alaska Science Nuggets

Continental Drift

Earthquakes - Kit

Earthquakes - VHS

Earthquakes - van Rose

Exploring Soil and Rocks

Faulting and Folding 15 mg

A Fine Science 1986 Series

Geological History of Saskatchewan Shares -

Geology of Saskatchewan

Global Atlas

How to Write Science Fiction & Fantasy

The Informazing Resource Book

Innovations in Science. Levels 4 - 6

I.S.I.S. (Individualized...

Janice VanCleave's Earth Science...

National Geographic Picture Atlas...

Plate Tectonics - The Puzzle of the Continents

Plate Tectonics (Through the Microscope)

Predicting Volcanic Eruptions

Saskatchewan Resource Series - Palak 1/2 / Capacitics

Science Directions 8

Science Experiences: Cooperative...

Science Equals Success

Science in the News

Science Is...: A Source Book...

Teacher Reference

Animals in the Classroom, Selection...
Cockroaches and Things
Energy and Society
Energy Sources
Energy Transfer
Global Science: Energy, Resources...
How to Encourage Girls in Math & Science
How to Write Science Fiction & Fantasy
The Informazing Resource Book
Instructional Strategies Series
Janice VanCleave's Chemistry for Every Kid
Life Science (Museum to Go!)

Living and Learning in the Space Age
Magnetic Moments: Science Teaching...
Making the Grade: Evaluating Student...
People & Caribou in the Northwest...
Science Club: Organization and Program...
Science Is...: A Source Book...
Selling Science to Students
Teaching Modern Science.
Teaching Science Today
Together We Learn - VHS
Together We Learn - Clarke

The titles listed in this bibliography have been indexed according to the following topics listed in *Science: A Curriculum Guide for the Middle Level* (p. 10). For the purposes of this bibliography, the additional headings of "General Reference" and "Teacher Reference" have also been included. Titles under these headings may be useful in support of the curriculum and are found at the end of this topical index. Please refer to the curriculum document for time allotments for each topic.

Grade 9 Topical Index

Core units:

- Saskatchewan Environment
- Chemistry and You
- Using Electricity
- · Risks and Limits
- Science Challenge (Integrated into all units)

Optional Units:

- The Atmosphere
- Diversity of Life
- Fluids and Pressure

The Atmosphere

Acid Rain: The Invisible Threat
Atmospheric Science. Vol. 1
Atmospheric Science. Vol. 3
A Book of Weather Clues
The Canadian Junior Green Guide
The Climate Puzzle: The Atmosphere
Climates of Canada
A Fine Science 1985 Series
Forecasting the Weather
How to Write Science Fiction & Fantasy
Hurricane - Earth's Greatest Storm
The Informazing Resource Book
I.S.I.S. (Individualized Science...

Janice VanCleave Astronomy for Every Kid:
Janice VanCleave's Earth Science for...
Learning About Weather
Pollution Patrol. 3rd ed.
Rain to Dams
Reading About Science Book: Book 4
Science Is...: A Source Book of...
Thunderstorms: Nature's Fury
Two Views: Global warming
The Weather Sky
Why Do Volcanoes Erupt?

Chemistry & You

The Acme School of Stuff
CEPUP (Chemical Education for Public...
Chemical Reactions. Teacher's Guide
Consumer Chemistry
The Epicurean Laboratory
A Fine Science 1985 Series
How to Write Science Fiction & Fantasy
The Informazing Resource Book
I.S.I.S. (Individualized Science...
Janice VanCleave's Chemistry for Every Kid

Materials
Project Wild (1990) Activity Guide
Reading About Science: Book 4
The Science Cookbook
Science Directions 9
Science Equals Success
Science Essentials: Matter
Science Is...: A Source Book...
SciencePlus: Technology and Society 9
The Secret Life of Cosmetics
Tops Learning Systems

Science Challenge

Blue Ribbon Science Fair Projects

The Book for Women Who Invent or Want To

The Complete Science Fair Handbook

Education Goes Outdoors

Engineering Projects for Young Scientists

Environmental Science

50 Simple Things Kids Can Do To Save the...

The Informazing Resource Book

How Sport Works

How to do Successful Science Projects

How to Make a Chemical Volcano...

How to Write Science Fiction & Fantasy

Inventions: An Amazing Investigation

Nuts & Bolts: A Matter of Fact Guide...

Our Future in Space

Project Wild (1990) Activity Guide

Rediscovery

Rediscovery: The Eagle's Gift Science Alive! A Science Fair...

Science Fair

Science Fairs: Organization

Science Is ...: A Source Book of ...

Science Matters
Science Olympics

Sciencefare: A Practical Guide... and Students

Teaching The Native American. 2nd ed.

This Planet Is Mine

Using Electricity

The Acme School of Stuff

Conceptual Physics: A High School Physics...

Electricity and Magnetism

Energy and Society

Energy Projects for Young Scientists

The Energy Resource Game

Experimenting with Batteries, Bulbs and Wires

Experimenting with Magnetism

Exploring Electricity

Exploring Forces and Structures

How to Write Science Fiction & Fantasy

The Informazing Resource Book

Janice VanCleave's Physics for Every Kid

The Macmillan Book of How Things Work

Microelectronics

Project Wild (1990) Activity Guide

Reading About Science: Book 3

Science Directions 9

Science Is...: A Source Book of...

SciencePlus: Technology and Society 9

SEEDS (Society, Environment & Energy...

The Thomas Edison Book of Easy and...

Tops Learning Systems

Understanding Science 1

General Reference

Atlas of the Environment

Claiming the Future

Discovery & Inventions

Discovery! Experiences with...

Do Animals Dream?

Graphical Analysis.

How Do They Do That

How to Write Science Fiction & Fantasy

The Informazing Resource Book

Inventions: An Amazing Investigation

The Kids' Environment Book

The Kids' Guide to Social Action

Magic Tricks, Science Facts

Myths of the Iroquois

Science Edition 3 Series

Science Is ...: A Source Book of ...

Science Matters: Achieving Scientific...

When Do Fish Sleep

Why Do Dogs Have Wet Noses?

Why Do Clocks Run Clockwise?

The World Map

Grade 9 Media Index

Atlas

Global Atlas

Audiocassette

When Do Fish Sleep

Game

The Energy Resource Game

Kit

Saskatchewan Resource Series Two Views: Global warming Two Views: Waste Management

Map

pH of Saskatchewan Soils The World Map

Microslide

Micro Data Cards

Software

Discovery! Experiences with Scientific Forecasting the Weather Graphical Analysis. Verson 2.5 Pollution Patrol. 3rd ed.

Videodisc

Animal Pathfinders
Atmospheric Science. Vol. 1
Atmospheric Science. Vol. 3
Race to Save the Planet
Science Essentials: Matter

Videotape

Acid Rain The Acme School of Stuff The Climate Puzzle: The Atmosphere **Energy and Society** A Fine Science 1985 Series A Fine Science 1986 Series Hurricane - Earth's Greatest Storm It Starts At Home Series Magnetic Moments: Science Teaching... Of Dice & Men Perspectives in Science Package Race to Save the Planet Series Resdiscovery: The Eagle's Gift Science Edition 3 Series Science Essentials: Geology Science Essentials: Matter Thunderstorm: Nature's Fury

Wall Chart

Enviro-Canada Series 1

Together We Learn

Exploring Soil and Rocks (6, 7, 8) \$ 7.96
50 Simple Things Kids Can Do (6, 7, 8, 9)
Fishwheels and How to Guild Them (7) \$ 5.50
Flipbook Animation (7)
Foodworks (6, 7, 8, 9)
Forces: Building A Cantilever (7)
Heat (7)
Heat and Temperature (7)
How Sport Works (7, 9) \$ 7.96
How Things Fly (7)
Indian Uses of Native Plants (9)
Instructional Strategies Series (6, 7, 8, 9) \$10.00
Inventions (6, 7, 8, 9) \$ 8.95
Iroquois Use of Maize (8)
ISIS Teacher's Manual (6, 7, 8, 9) \$ 9.95
Materials (7)
Myths of the Iroquois (6, 7, 8, 9)
Nuts & Bolts (7, 8, 9)
Playing Fair? (6, 7) \$ 5.00
Pyramids (7)
Reading About Science Books, 1, 2, 3 (6, 7, 8, 9)
Rocks & Soil (7)
The Science Book of Air (7)
Science Club (6, 7, 8, 9) \$ 8.00
Science Express (6, 7, 8)
Sciencefare (6, 7, 8, 9)
Sound Science (6)
Structures (7)
Tops Learning Systems (7, 8)
You and Toxicology (6, 9)
Videotapes
videotapes
Acme School of Stuff (7, 8, 9)
The Climate Puzzle (6, 8, 9) plus tape \$ 1.00
C'Mon Geese (7) plus tape \$ 1.00
A Fine Science (7, 8, 9) plus tape \$ 1.00
It Starts At Home (6, 7, 8, 9)
Landscape Series (7) plus tape \$ 1.00
Patterns of Climate (6) plus tape \$ 1.00
Race to Save the Planetg (9)
Science Edition 3 (7, 8, 9) plus tape \$ 1.00
Science Essentials: Geology (7, 8, 9) plus tape \$ 1.00
Science Essentials: Matter (6, 9) plus tape \$ 1.00
Together We Learn (6, 7, 8, 9)

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Landscapes: A Guide to the Landforms and Ecology of Southern Saskatchewan

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Fax: (413) 527-8286

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Corporation Communications

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Regina, SK S4P 0S1

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Department of Secondary Education

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UTP University of Toronto Press

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